

STIC Search Rep Biotech-Chem Library

STIC Database Tracking Number: 96045

TO: Mark Navarro Location: 8A15 Art Unit: 1645

Friday, June 06, 2003

Case Serial Number: 09/150947

From: Barb O'Bryen

Location: Biotech-Chem Library

CM1-6A05

Phone: 308-4291

barbara.obryen@uspto.gov

Search Notes

Mark,

X

all of the requested segs contain bunches of Xaa's. With standard search parameters, Xaa's in either the query seq or the database seq are considered non-matches, so I don't know how useful you will find these results to be. We have an alternative search that can be done in cases like this, called "DX matching table". With this matching table, Xaa in the query sequence matches anything in the database seq. Xaa in a database seq still is considered a non-match.

If you think DX matching table results would be more useful to you, please let me know. Barb

O'Bryen, Barbara

From: Sent:

To: Subject: Navarro, Albert

Thursday, June 05, 2003 1:38 PM

O'Bryen, Barbara

09/150,947

Mark Navarro 1645 306-3225 8A15

Hello Barb,

Could I trouble you for a search and an interference search of:

SEQ ID NO: 13-18

Thanks

Mark



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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd

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Minimum DB
Maximum DB
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Perfect score:
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Maximum Match 100%
Listing first 45 summaries
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score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.
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31
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  AAY93741
ABP29565
ABB76254
ABX97855
AAY72193
AAM59147
AAM71683
AAM31976
ABG41496
AAG63856
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Staphylococcus aur
Staphylococcus aur
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Human bone marrow
Peptide #6013 enco
Amino acid sequenc
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AAY93741
ID AAY9
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AC AAY9
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ALIGNMENTS

03-OCT-2000 (first entry)

AAY93741;

AAY93741 standard; Protein; 233 AA.

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DE	Amino acid sequence of the mature SMEZ-2 superantigen protein.
XX	
ΧW	Sperantigen; SMEZ-2; SPE-G; SPE-H; SPE-J; Streptococcal disease;
ΚW	Kawasaki syndrome; T cell activation; cancer therapy.
×	
S	Streptococcus pyogenes.
××	
PN	WO200039159-A1.
X	
PD	06-JUL-2000.
XX	
PF	24-DEC-1999; 99WO-NZ00228.
×	
PR	24-DEC-1998; 98NZ-0333589.
×	
ΡA	(AUCK-) AUCKLAND UNISERVICES LTD.
XX	
ΡI	Fraser JD, Proft T;
××	
DR	WPI; 2000-452370/39.
DR	N-PSDB; AAA47147.

Novel superantigens from streptococcus pyogenes useful for genotyping streptococcus pyogenes clones expressing SMEZ-2 and for diagnosing a Kawasaki syndrome

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RESULT 2
ABP29565
ID ABP2
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Best Local
The invention relates to a protein (ABP25413-ABP30895) from group B streptococcus/GBS (Streptococcus agalactiae) or group A streptococcus/GAS (Streptococcus sydenes) or group A streptococcus/GAS (Streptococcus pyogenes), comprising one of 5483 sequences (S1), given in the specification. The proteins have antibacterial and antiinflammatory activity. (I), nucleic acids encoding (I), ABN65044-ABN71526 and antibodies that bind (I) are used in the manufacture of medicaments for the treatment or prevention of infection or disease caused by Streptococcus bacteria, particularly S. agalactiae and S. pyrogenes.
                                                                                                                       Claim 1;
                                                                                                                                                           or disease caused
                                                                                                                                                                                                 N-PSDB;
                                                                                                                                                                                                                                     Tettelin
                                                                                                                                                                                                                                                                                                            24-NOV-2000;
07-MAR-2001;
                                                                                                                                                                        New Streptococcus
                                                                                                                                                                                                                                                Telford J,
                                                                                                                                                                                                                                                                         (CHIR-)
                                                                                                                                                                                                                                                                                                                                                            29-OCT-2001; 2001WO-GB04789
                                                                                                                                                                                                                                                                                                                                                                                                              WO200234771-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                   Streptococcus pyogenes
                                                                                                                                                                                                                                                                                                                                                                                                                                                          group A streptococcus; Strept
antiinflammatory; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Streptococcus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Streptococcus polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and SPE-J. The superantigen polynucleotides and polypeptides are used for subtyping Streptococci. They are also used for diagnosing Streptococcal disease. The superantigens are used in diagnosis of disease such as Kawasaki syndrome. They are also useful to recruit and activate T cells in a relatively non-specific fashion since they bind a large number of T cell receptor molecules by binding to
                                                                                                                                                                                                                                                                                                                                     27-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        02-JUL-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABP29565 standard;
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                                                                                                                                             detecting
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                                                                                                                                                                                               2002-352536/38
DB; ABN70196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      149
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INST GENOMIC
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5; Conserv
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2000GB-0028727.
2001GB-0005640.
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                                                                                                                  3947; 4525pp; English.
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                                                                                                                                             compound
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    72pp;
                                                                                                                                                    protein for the treatment or prevention of infection by Streptococcus bacteria, such as meningitis, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GBS;
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50.08;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      S; group B streptococcus; Streptococcus agalactiae;
Streptococcus.pyogenes; antibacterial;
ction; vaccine; meningitis; gene therapy.
                                                                                                                                             that binds
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73;
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SMEZ-2, SPE-G, SPE
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n -
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                                                                                                                                   Reagent for treating cancer without the need for e.g. radiotherapy, comprises a specific V beta subset of {\tt T} cells sensitized to a growing tumor and stimulated with superantigens
                                                                                                                                                                                                Terman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nucleic acids encoding (I) are used to detect Streptococcus in a biological sample. (I) is used to determine whether a compound binds t (I). A composition comprising (I) or a nucleic acid encoding (I), may used as a vaccine or diagnostic composition. The disease caused by Streptococcus that is prevented or treated may be meningilis. Nucleic acid encoding (I) may be used to recombinantly produce (I) and may be used in gene therapy. Antibodies to (I) are used for affinity
                                                                                                                                                                                                                   (TERM/)
                                                                                                                                                                                                                                                                             03-OCT-1989;
                                                                                                                                                                                                                                                                                     31-JAN-1994;
19-JUN-1995;
                                                                                                                                                                                                                                                                                                                                      02-MAY-2002
                                                                                                                                                                                                                                                                                                                                                         US2002051765-A1.
                                                                                                                                                                                                                                                                                                                                                                           Staphylococcus aureus
                                                                                                                                                                                                                                                                                                                                                                                              Enterotoxin antitumour;
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                                                                                                                                                                                                                                                                                                                                                                                                                                               09-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABB76254;
                                                                                                                                                                                                                                                          17-JAN-1991;
                                                                                                                                                                                                                                                                                                                   19-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABB76254 standard;
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                                                                                                                                                                                                                                                                   17-JAN-1
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                                                                                                                                                                           2002-415198/44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     174
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therapy.
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90US-0466577.
91WO-US00342.
92US-0891718.
93US-0025144.
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95US-0491746.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Peptide;
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81;
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The present sequence corresponds to amino acids 151-167 of enterotoxin C1 (SEC1, see ABB76238) of Staphylococcus aureus. Sequence similarities are found in the corresponding regions of other staphylococcal enterotoxins and streptococcal pyrogenic exotoxins (see ABB76252-59). In the present invention, synthetic polypeptides useful in tumour therapy and in blocking or destroying autoreactive T and B lymphocyte populations are characterised by substantial structural homology to staphylococcal enterotoxin A and enterotoxin B, and to streptococcal pyrogenic exotoxins, with statisfically significant sequence homology and similarity,

cysteine residues

Disclosure;

Page 4; 17pp; English

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RESULT 4
AAY97855
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              more superantigens ex vivo to generate stimulated cells, selecting a specific V beta subset of cells, and reintroducing these cells into the patient to induce an in vivo therapeutic, tumouricidal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          profiles. These superantigens are used to treat solid tumours, including their metastases, without radiation, surgery or standard chemotherapeutic agents. A claimed method of human cancer treatment involves contacting haematopoietic cells from a patient with one or
                                                                                                                                                                 The invention relates to novel peptides (AAY97838-Y97843) comprising a consensus amino acid sequence derived from two conserved regions (regions 1 and 2) of Staphylococcus aureus enterotoxins and streptococcal pyrogenic toxins. Consensus region 1a (a preferred consensus region 1) has the sequence x25-x26-y-G-G-X1-T-X2-X3-X4-X5-N (AAY97863) and consensus region 2a (a preferred consensus region 2) has
                                                                                                                                                                                                                                                                                                                                                                       WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Staphylococcal infection; vaccine; antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Staphylococcus aureus enterotoxin SEC, conserved region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                        (AAY97864), where: X1, X8, X13 and X24 are each independently selected from L. I and V; X2,X4, X5, X6, X7, X9, X10, X11, X12, X14, X15, X16, X17, X18, X19, X20, X21, X22 and X23 are each independently selected from the group consisting of any amino acid; X3, X5 and X26 are each independently selected from the group consisting of any amino acid; X3, X5 and X26 are each independently selected from the group consisting of any amino acid and of no amino acid;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200020598-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAY97855 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   reaction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-OCT-1998;
18-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Staphylococcus aureus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-AUG-2000
                                                                                                                                                                                                                                                                             Example 1; Page 72; 115pp; English
                                                                                                                                                                                                                                                                                                             infections
                                                                                                                                                                                                                                                                                                                Peptides useful for syndrome and septic infections -
                                                                                                                                                                                                                                                                                                                                                                                                        Bannan JD,
                                                                                                                                                                                                                                                                                                                                                                                                                                   (UYRQ ) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-SEP-1999;
                                                                                                                                     X9-X10-X11-X12-X13-D-X14-X15-X16-R-X17-X18-X27-X19-X20-X21-X22-X23-X24-Y
                                                                                                                                                      (AAY97863) and consensus region 2a the sequence K-X6-X7-X8-
                is either L or Y.
invention also re
                                                                                                                                                                                                                                                                                                                                                                          2000-303782/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 KXXXTXQEXD 10
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5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KKSVTAQELD 10
                                                                                                                                                                                                                                                                                                                                                                                                      Visvanathan K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                     ROCKEFELLER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                also relates to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98US-0168303
99US-0335581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99WO-US22180
                                                                                                                                                                                                                                                                                                                            preventing shock from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     74.2%;
against, or reduce the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      enterotoxin; septic shock; toxic shock;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 23;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                        Zabriskie
                                                                                                                                                                                                                                                                                                                          and reducing the symptoms of toxic shock staphylococcal and streptococcal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ٥
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ร
   induced by severity of
                                                           from the group consisting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
   y the peptides of toxic shock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                           selected from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
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Providing protection against, and reducing the severity of,

WPI; 2001-080820/09. Visvanathan K, (UYRQ) UNIV ROCKEFELLER

Zabriskie JB;

18-JUN-1999;

9905-0336627

16-JUN-2000; 2000WO-US16680

WO200078790-A2 Staphylococcus autoimmune

disease;

28-DEC-2000

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AAY72193
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              staphylococcal enterotoxin or streptococcal exotoxin and both the peptides and antibodies can be used in diagnostic assays to aid in the diagnosis of disease related to the presence of bacterial toxins. Nucleic acids encoding a peptide of the invention can be used for the production of the peptides for diagnostic reagents, as vaccines and for therapies for pyrogenic exotoxin related diseases. Vectors expressing high levels of the peptides can be used in immunotherapy and immunoprophylaxis when expressed in humans. The antibodies are used for passive immunisation therapy to prevent or increase resistance to toxic shock syndrome or septic shock and to ameliorate the effects of conditions associated with the presence of staphylococcal or streptococcal pyrogenic toxins. The amino acid sequences of the peptides are sufficiently common that they can be used for eliciting antibodies which are cross-reactive with toxins derived from various bacteria. Sequences AAY97853-Y97861 represent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the enterotoxins of staphylococcus aureus (which are also pyrogenic exotoxins) constitute a family of structurally related toxins which share similar biological activities. They stimulate CD4+, CD8+ and gamma-delta+ T-cells by binding the beta-chain variable region (V-beta) elements on the lateral face of the T-cell receptor (TCR) while simultaneously binding the lateral face of the class II major histocompatibility complex (MHC) of antigen presenting cells. This causes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             pyrogenic toxins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  the immune system, causing injury to the host. The peptides are used to prevent, treat or protect against toxic shock and septic shock resulting from bacterial infections in mammals, particularly humans. The peptides are used for inducing serum antibodies that bind at least one
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          and septic shock caused by the staphylococcal and streptococcal pyrogenic toxins. The pyrogenic exotoxins of Group A streptococche enterotoxins of Staphylococcus aureus (which are also pyrog
                                                                                                                                                                                                                                                                                                                                              Mononuclear cell; blastogenesis; inhibitor; HIV; replication; therapy; staphylococcal enterotoxin; human immunodeficiency virus. " ~~ "
                                                                                                                                                                                                                                                                                                                                                                                                    Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY72193;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAY72193 standard; peptide; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Group A streptococci pyrogenic exotoxins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            aberrant proliferation of T-cells, which stimulates other components
                                                                                                                                                                                                                                                                                                                                                                                                                                             24-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 KXXXTXQEXD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
5; Conser
                                                                                                                                                                                                                                                                                                                                                                                                        from region 2 of staphylococcal enterotoxin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KKSVTAQELD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 23;
Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB
14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 24;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A streptococci and
                                                                                                                                                                                                                                                                                                                                                                                                          SEC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
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RESULT 6
AAM59147
ID AAM5
XX AAM5
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AC AAM5
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XX Huma
XX Huma
XX Huma
XX Homo
PN W020
XX W020
XX 30-J
PR 26-H
PR 26-H
PR 21-S
PR 2
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Best Local :
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The present invention provides a number of single exon nucleic acid probes which are derived from genomic sequences expressed in the human brain. They can be used to measure gene expression in brain cell sample which may enable the diagnosis and improved treatment of nervous system
                                                                                                                                   Example 4;
                                                                                                                                                                                                             Single
                                                                                                                                                                                                                                                                                                                                                                                                              04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JUN-2000;
03-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           epilepsy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; brain expressed exon; gene expression analysis; microarray; Alzheimer's disease; multiple sclerosis; so
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        virus (HIV), inhibiting HIV replication and protecting a mammal against the deleterious effects of HIV. The peptide is also used to amaliorate the effects of autoimmune diseases associated with the presence of HIV. The Ab is used for passively immunising a mammal against the deleteriou
                                                                                                                                                                                                                                                                                                                                                                                                                                   21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-FEB-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAM59147;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The peptide, nucleic acid encoding the peptide and antibody (Ab) produced against the peptide are useful for inhibiting blastogenesis of mononculear cells (eg. T cells) in the presence of human immunodeficiency
                                                                                                                                                                                                                                                                                                                                                           (MOLE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAM59147 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                using peptides from streptococcal toxins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            enterotoxin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               immunodeficiency virus infections and associated deleterious effects, using peptides from homologous sequences of staphylococcal and
                                                                                                                                                                                                                                                                                                             SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        brain
                                                                                                                                                                                                        exon nucleic acid
                                                                                                                                                                                                                                                                                                                                                        MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cancer.
                                                                                                                                                                                                                                                                                                          Hanzel DK,
                                                                                                                                SEQ
                                                                                                                                                                                                                                                                                                                                                                                                       2000US-0180312
2000US-0207456
2000US-0608408
2000US-0632366
2000US-06323687
2000US-0234687
2000US-0236359
2000US-0236263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     expressed single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sequence is a peptide from SEC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Page 36; 76pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001WO-US00667
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                                                                                                                                31252;
                                                                                                                                                                                                                                                                                                          Chen W,
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                                                                                                                                                                                                        probes
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                                                                                                                              650pp
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 23;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     exon
                                                                                                                                                                                                                                                                                                          Rank
                                                                                                                                                                                                for analyzing gene expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   probe encoded protein
                                                                                                                                +
                                                                                                                                                                                                                                                                                                          DR.
                                                                                                                                Sequence
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14;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22;
                                                                                                                           Listing;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        s; probe;
schizophrenia;
                                                                                                                           English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQ
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  samples,
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                     Query Match
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Matches 5
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Best Local
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                                                                                                                                                                                                                                                                                   04-FEB-2000;
26-MAY-2000;
30-JUN-2000;
                                                                       probes which are derived from genomic sequences expressed in the human bone marrow. They can be used to measure gene expression in bone marrow samples, which may enable the improved diagnosis and treatment of cancers such as lymphoma, leukaemia and myeloma. The present sequence is a protein encoded by one of the probes of the invention.
                                                          Sequence
                                                                                                                           The
                                                                                                                                                             Human genome-derived single analyzing gene expression in
                                                                                                                                                                                          WPI;
                                                                                                                                                                                                            Penn
                                                                                                                                             Example
                                                                                                                                                                                                                                                27-SEP-2000;
04-OCT-2000;
                                                                                                                                                                                                                                                                03-AUG-2000;
21-SEP-2000;
                                                                                                                                                                                                                                                                                                                        30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                           09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                microarray;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia, epilepsy and cancers. The present sequence is a protein encoded by one of the probes of the invention.
                                                                                                                                                                                                                             (MOLE-)
                                                                                                                                                                                                                                                                                                                                                            WO200157276-A2
                                                                                                                                                                                                                                                                                                                                                                               Homo
                                                                                                                                                                                                                                                                                                                                                                                                                          Human bone marrow expressed
                                                                                                                                                                                                                                                                                                                                                                                                                                             06-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAM71683 standard;
                                                                                                                                                                                                                                                                                                                                                                                                         Human;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                           present invention
                                                                                                                                                                                                           SG,
                                                                                                                                                                                          2001-488900/53.
                                                                                                                                                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                         bone
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                      Similarity 5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 KXXXTXQEXD
                                                                                                                                           4; SEQ ID NO:
                                                                                                                                                                                                                             MOLECULAR DYNAMICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
5; Conserv
  KXXXTXQEXD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KALSTGOEID
                                                                                                                                                                                                           Hanzel DK,
                                                           29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29
                      Conservative
                                                                                                                                                                                                                                              ; 2000US-0180312.
; 2000US-0207456.
; 2000US-0608408.
; 2000US-0632366.
; 2000US-0234687.
; 2000US-0234687.
; 2000US-0236359.
                                                                                                                                                                                                                                                                                                                                                                                                cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                        2001WO-US00668
                                                           Ä
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                                                                                                                                                                                                                                                                                                                                                                                                         expressed
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  10
                             74.2%;
50.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                            entry)
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                                                                                                                                                                                                                                                                                                                                                                                              leukaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           74.2%;
                                                                                                                        provides a number of single exon
                                                                                                                                         31989; 658pp + Sequence
                                                                                                                                                                                                          Chen
                                                                                                                                                              in human
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                     Score 23; DB Pred. No. 17; 0; Mismatches
                                                                                                                                                             exon nucleic acid probes n human bone marrow -
                     0
                                                                                                                                                                                                                                                                                                                                                                                                                          probe
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Pred.
                                                                                                                                                                                                                                                                                                                                                                                                        exon;
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                                                                                                                                                                                                                                                                                                                                                                                              kon; gene expression analysis; probe;
lymphoma; myeloma.
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                            DB
17;
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17;
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                                      Length
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                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ
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                                                                                                                        nucleic
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                   Gaps
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KALSTGQEID

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RESULT 8
AAM31976
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ABC41496
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Best Local S
Matches 5
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                                                                                                                                                                                                                                                                                    The present invention relates to single exon nucleic acid probes (SENP: see AAI31315-AAI57546). The present sequence is a peptide encoded by one such probe. The probes are useful for producing a microarray for predicting, measuring and displaying gene expression in samples derived from human placenta. The probes are useful for antenatal diagnosis of
                                                                                                                                                                                                                                                                                                                                                     Claim 27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   genetic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Probe; microarray; human; placenta; antenatal diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Peptide #6013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAM31976;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAM31976 standard;
        chronic obstructive familial idiopathic tuberous sclerosis;
                                       Human; single exon probe; asthma; lung cancer; COPD;
                                                             Human
                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                        analyzing
                                                                                                                                                                                                                                                                                                                                                                                  Human
                                                                                                                                                                                                                                                                                                                                                                                                                                             (MOLE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-AUG-2000;
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                                                                                 19-AUG-2002
                                                                                                                        ABG41496 standard;
                                                                                                                                                                                                                                                                             human genetic disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                      2001-488897/53.
                                                                                                                                                                                                                                                                                                                                                                                                                           SS
                                                                                                                                                                                                                                                                                                                                                                           genome-derived single exon nucleic acid probes useful for gene expression in human placenta -
                                                           peptide
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                                                                                                                                                                                                                 Similarity
5; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                              MOLECULAR DYNAMICS
                                                                                                                                                                          KALSTGQEID
                                                                                                                                                                                             KXXXTXQEXD
                                                                                                                                                                                                                                                                                                                                                                                                                          Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                    SEQ ID No 32245; 654pp;
                                                                                                                                                                                                                                                                                                                                                                       gene expression
                                                                                                                                                                                                                                                          29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000US-0180312.
2000US-0207456.
2000US-0608408.
2000US-0632366.
2000US-0234687.
2000US-0234685.
2000US-02346359.
                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US00663
                                                                                (first
                                                           encoded by genome-derived single exon probe
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                encoded by probe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Protein;
                                                                                                                        Peptide;
        pulmonary disease; interstitial lung d
pulmonary fibrosis; neurofibromatosis;
Gaucher's disease; Niemann-Pick diseas
                                                                                                                                                                           19
                                                                               entry)
                                                                                                                                                                                                                           74.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                           Chen W,
                                                                                                                                                                                                                                                                                                                                                                        'n
                                                                                                                                                                                                                                                                                                                                                                                                                                               INC
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                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                           Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                       human placenta
                                                                                                                                                                                                                                                                                                                                                                                                                           Rank DR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ₿
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                for measuring placental gene expression
                                                                                                                                                                                                                mismatches
                                                                                                                                                                                                                                                                                                                                                    English.
                                                                                                                                                                                                                            DB
17;
                                                                                                                                                                                                                                      22;
                                                                                                                                                                                                                 <u>ن</u>
                                                                                                                                                                                                                                    Length 29
haemosiderosis;
                                                                                                                                                                                                                 Indels
                              disease;
                                                            SEQ ID 31161.
                                                                                                                                                                                                                 0;
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pulmonary histiocytosis; lymphangioleiomyomtosis; Karagener syndrome; pulmonary alveolar proteinosis; fibrocystic pulmonary dysplasia; primary ciliary dyskinesis; pulmonary hypertension; hyaline membrane disease.
 Penn
                                                                                                                                                                                                                                                                    15-NOV-2001
                                                                                                                                                                                                                                                                                                       WO200186003-A2
                                                                                                                                                                                                                            30-JAN-2001; 2001WO-US00665
                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                 26-MAY-2000;
30-JUN-2000;
                                     (MOLE-)
                                                                                                                                  03-AUG-2000;
                                     MOLECULAR DYNAMICS INC
                                                                                                                                ; 2000US-180312P.
; 2000US-207456P.
; 2000US-0608408.
; 2000US-0632366.
                                                                                          2000US-234687P
2000US-236359P
 Chen
ξ
 Rank
 DR
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Spatially-addressable set of single exon nucleic acid probes, used to measure gene expression in human lung samples -

WPI; 2002-114183/15

Claim 27; SEQ ID No 31161; 634pp; English.

The invention relates to a spatially-addressable set of single exon nucleic acid probes for measuring gene expression in a sample derived from human lung comprising single exon nucleic acid probes having one of complements or the 1287 open reading frames derived from the 12614 probes; the novel set of probes which hybridise at high stringency to a collection of detectably labeled nucleic acid expressed in the human lung; measuring gene expression in a sample derived from human lung; measuring gene expression in a collection of detectably labeled nucleic acids derived from human lung measuring gene expression of the expression of detectably labeled nucleic acids derived from human lung a comprising the label detectably bound to each probe of the entray; identifying exons in a eukaryotic genome, comprising comprising comprising exons probe, and to probe, and to predict acids from entrayotic genome, comprising comprising capital predicting at least one exon from genomic sequences of the eukaryote; and (b) detecting specific hybridisation of detectably beauting a fragment identical to the predicted exon, the probe is included in the above mentioned microarray; assigning exons to a single gene, comprising (a) identifying exons from genomic sequence by the method above and (b) measuring the expression of each of the exon in several tissues and/or cell types using hybridisation to a single gene, comprising one of 12011 sequences, mentioned in the exon, where a common pattern of the expression of the exons in several tripes and the exons in the tissues and/or cell types indicates that the exon sequence in the specification, or encoded by the probes of the analysis, and for identifying exons in a gene, particularly using human lung derived mRNA and for the study of lung disease (EOPD), interstital lung disease (IID), femilial idiopathic pulmonary disease.

Nemann-Pick disease, Hermansky-Pudlak syndrome, fabrocystic pulmonary disease, pulmonary hypertension in the disease, hyphangiolelonyomotosis, pulmonary hypertension

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RESULT 11
AAR13208
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AAG63856
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Best Local S
Matches 5
                                                                                                                               Matches
                                                                                                                                         Query Match
Best Local
           AAR13208
                             AAR13208 standard; Protein; 238 AA
                                                                                                                                                                                                                                                                                                           Producing stable modified Staphylococcal toxin polypeptide for treating infectious diseases, e.g. mastitis, in animals, involves substituting cysteine at specified position of modified Staphylococcal toxin C1 with serine -
                                                                                                                                                                          Sequence
                                                                                                                                                                                                     useful for preventing or treating infectious diseases due to microorganisms in animals such as cows, plys, horses, sheep, hens,
                                                                                                                                                                                                                             The present sequence represents a modified Staphylococcal enterotoxin C1, designated SEC-SER. The modified toxin is characterised in that the 95th amino acid (cysteine) is substituted with serine. This results in a toxin that has improved stability. The modified enterotoxin is
                                                                                                                                                                                                                                                                                 Claim 1; Page 59-60; 64pp; English.
                                                                                                                                                                                               dogs and
                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-522585/57.
N-PSDB; AAH74983.
                                                                                                                                                                                                                                                                                                                                                                                                                                     17-FEB-2000; 2000KR-0007612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Staphylococcus sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAG63856 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                             Lee H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-OCT-2000; 2000WO-KR01241.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200160851-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Enterotoxin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Amino acid sequence of a modified Staphylococcal enterotoxin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAG63856;
                                                                                                                                                                                                                                                                                                                                                                                                                  (GLDS ) LG CHEM
                                                                                    140 KKSVTAQELD 149
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                                                                                                         μ,
                                                                                                                              Similarity
5; Conserv
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                                                                                                         KXXXTXQEXD 10
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                                                                                                                                                                                              cats, e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KALSTGQEID 19
                                                                                                                             74.2%;
nilarity 50.0%;
Conservative
                                                                                                                                                                         228 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C1;
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                                                                                                                                                                                                                                                                                                                                                                                            Han
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEC-SER; infectious disease; mastitis.
                                                                                                                                                                                               mastitis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 228 AA.
                                                                                                                            Score 23; DB 22;
Pred. No. 1.4e+02;
0; Mismatches 5;
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                            8,
                                                                                                                                                                                               COWS.
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                                                                                                                                                 Length 228;
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                                                                                                                             Indels
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RESULT 12
AAR45016
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Matches
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                                                                                                                                                                                                                                                                                                                                                                                            treating cancer, activating cytokine mediators and procoagulant systems, augmenting natural killer cell cytotoxicity, etc. The enterotoxin can be administered intravenously, optionally with ibuprofen to attenuate toxic reaction to SEC3. Synthetic polypeptides having structural homology to Staphylococcal exotoxins are claimed, provided the homology includes statistically significant sequence homology, alignment of Cysteine residues and similar hydropathy profiles.
         01-JUN-1992;
                              01-JUN-1993;
                                                     09-DEC-1993.
                                                                                               Staphylococcus
                                                                                                                     Staphylococcal enterotoxin; SE; cancer; tumouricidal agent; autoimmune disease; toxicity; Protein A; perfusion system.
                                                                                                                                                        Staphylococcal
                                                                                                                                                                              08-JUN-1994
                                                                                                                                                                                                                         AAR45016 standard; protein; 238 AA
                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEC3 was isolated and purified from S.aureus. It can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Treating cancer with enterotoxin from Staphylococcus aureus administered by IV injection, having same tumoricidal activity as Staphylococcal protein A without potential toxic reactions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1991-237984/32
                                                                                                                                                                                                     AAR45016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Fig 1; 74pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Terman DS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Staphylococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEC3; cancer treatment; pyrogen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Staphylococcal enterotoxin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-JAN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-OCT-1991
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                                                                                                                                                                                                                                                                                                                           Local Similarity les 5; Conserv.
                                                                                                                                                                                                                                                                                  150
                                                                                                                                                                                                                                                                                                       μ
                                                                                                                                                                                                                                                                                 KKSVTAQELD 159
                                                                                                                                                                                                                                                                                                       KXXXTXQEXD 10
                                                                                                                                                                                                                                                                                                                                                                         238 AA;
                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
         92US-0891718
                              93WO-US05213
                                                                                                aureus
                                                                                                                                                        enterotoxin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            90US-0466577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  91WO-US00342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     aureus
                                                                                                                                                                                                                                                                                                                                        74.2%;
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                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                      Score 23; DB 12;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tumouricide
                                                                                                                                                                                                                                                                                                                              5.
                                                                                                                                                                                                                                                                                                                                                  Length 238;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 be used for
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RESULT 13
AAB67343
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Best Local S
Matches 5
                                                                                                                                            31-JAN-1994;
19-JUN-1995;
03-OCT-1989;
17-JAN-1990;
17-JAN-1991;
01-JUN-1992;
02-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            which may be used in the methods of the invention for treating cancer in a patient. These SEs, and homologues of them, can be used as tumouricidal agents for treating cancers and autoimmune disease. They exhibit tumouricidal activity and toxicity identical to that observed for the Protein A perfusion system. They may be administered observed for the Protein A perfusion system.
                                                                                                                                                                                                                                                                                                                                                                                             AAB67343 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Fig 1; 90pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Use of staphylococcal enterotoxin(s) and homologues - treating cancer in a patient or for the treatment of \epsilon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1993-405418/50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (STON/)
The present invention relates to
                    Disclosure;
                                         and a
                                                                                                      Terman
                                                                                                                                                                                                                              30-OCT-1998;
                                                                                                                                                                                                                                                  30-JAN-2001
                                                                                                                                                                                                                                                                      US6180097-B1
                                                                                                                                                                                                                                                                                                             Tumour; cancer;
                                                                                                                                                                                                                                                                                                                                 Staphylococcus
                                                                                                                                                                                                                                                                                                                                                     23-APR-2001
                                                                                                                                                                                                                                                                                                                                                                          AAB67343;
                                                                                                                         (TERM/) TERMAN
                                                                                 2001-158657/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                               150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ĮĮ,
                                                 cell capable of stimulating antitumor immune reactivity in vitro vivo comprises exogenous nucleic acids encoding a superantigen
                                       costimulatory molecule
                                                                                                      DS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    injection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STONE J L.
TERMAN D S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
5; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                               KKSVTAQELD 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KXXXTXQEXD 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Terman DS
                   Fig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 238 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 given
                                                                                                                                           89US-0416530.
90US-0466577.
91WO-US00342.
92US-0891718.
93US-0025144.
                                                                                                                          U
                                                                                                                                                                                                                                                                                                                                 aureus enterotoxin C3
                                                                                                                                                                                               94US-0189424.
95US-0491746.
                                                                                                                                                                                                                              98US-0183437.
                    2; l6pp; English
                                                                                                                                                                                                                                                                                                             immune;
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                                                                                                                                                                                                                                                                                                                                                                                            peptide;
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50.0%;
                                                                                                                                                                                                                                                                                                             enterotoxin
                                                                                                                                                                                                                                                                                                                                                                                              238
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 are
tumour cell capable of stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  the treatment of auto-immune
                                                                                                                                                                                                                                                                                                                                 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Staphylococcal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 14;
1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 238;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               enterotoxins (SES)
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RESULT 14
ABB76239
ID ABB76
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Best Local S
Matches 5
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19-JUN-1995;
03-OCT-1989;
       The present sequence is the protein sequence of enterotoxin C3 (SEC3) of Staphylococcus aureus. Similarity is shown, in several stretches of sequence, between staphylococcal enterotoxins, streptococcal pyrogenic exotoxins and staphylococcal exfoliative toxins (see ABB76.344-44). In the present invention, synthetic polypeptides useful in tumour therapy and in blocking or destroying autoreactive T and B lymphocyte populations are characterised by substantial structural homology to staphylococcal enterotoxin A and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antitumor immune reactivity in vitro or in vivo contains and expresses an exogenous nucleic acid molecule encoding a superantigen or its active fragment and an exogenous nucleic acid molecule encoding a costimulatory molecule that activates T cells in conjunction with an antigenic stimulus. The invention may be used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           conjunction with an antigenic stimulation for cancer therapy by stimulating an in vivo or ex vivo.
                                                                                                                                        Reagent for treating cancer without the comprises a specific V beta subset of T tumor and stimulated with superantigens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Staphylococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Staphylococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABB76239;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                    Disclosure; Fig
                                                                                                                                                                                                                Terman
                                                                                                                                                                                                                                       (TERM/) TERMAN
                                                                                                                                                                                                                                                                02-MAR-1993;
                                                                                                                                                                                                                                                                                     17-JAN-1990;
17-JAN-1991;
                                                                                                                                                                                                                                                                                                                                                          19-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                   02-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                         US2002051765-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                            Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      antitumour;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABB76239 standard;
                                                                                                                                                                                        2002-415198/44.
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5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    therapy.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
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95US-0491746.
89US-0416530.
90US-0466577.
91WO-US00342.
92US-0891718.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               aureus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        aureus enterotoxin C3
                                                                                                                                                                                                                                                                9305-0025144
                                                                                                                    2
                                                                                                                                                                                                                                                                                                                                                                                                                                             208
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "given as
                                                                                                                                                                                                                                       S
                                                                                                                 17pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  74.2%;
                                                                                                                                                     cancer without the V beta subset of T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 superantigen; antigen; tumour; cancer;
                                                                                                                    English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 23;
Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 22;
. 1.4e+02;
. 5;
                                                                                                                                                     need for e.g. radiotherapy, cells sensitized to a growi
                                                                                                                                                                                                                                                                                                                                                                                                                                 the specification"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 238;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1mmune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
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enterotoxin

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pyrogenic

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RESULT 15
AAR13207
TO A COLOR OF THE TAX OX A COLOR OF THE TAX OX A COLOR 
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                      SEC1 was isolated and purified from S.aureus. It can be used for treating cancer, activating cytokine mediators and procoagulant systems, augmenting natural killer cell cytotoxicity, etc. The enterotoxin can be administered intravenously, optionally with ibuprofen to attenuate toxic reaction to SEC1. Synthetic polypeptides having structural homology to Staphylococcal exotoxins are claimed, provided the homology includes statistically significant sequence homology, alignment of Cysteine residues and similar hydropathy profiles.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          statistically significant sequence homology and similarity (2 value of Lipman and Pearson algorithm in Monte Carlo analysis exceeding to include allygment of cysteine residues and similar hydropathy profiles. These superantigens are used to treat solid tumours, including their metastases, without radiation, surgery or standard chemotherapeutic agents. A claimed method of human cancer treatment involves contacting haematopoietic cells from a patient with one or more superantigens ex vivo to generate stimulated cells, selecting a specific v beta subset of cells, and reintroducing these cells into the patient to induce an in vivo therapeutic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Treating cancer with enterotoxin from Staphylococcus aureus - administered by IV injection, having same tumoricidal activity
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Terman DS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Staphylococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Fig 1; 74pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            as Staphylococcal protein A without potential toxic reactions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1991-237984/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-JAN-1990;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEC1; cancer treatment; pyrogen; tumouricide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Staphylococcal enterotoxin C1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAR13207;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAR13207 standard; Protein; 239 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tumouricidal reaction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (TERM/) TERMAN D S. ·
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-JAN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-JUL-1991
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KXXXTXQEXD 10
239 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     238 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
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Pred. No. 1.4e+02;
); Mismatches 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 238;
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Query Match Best Local S Matches 5

Similarity 5; Conserv

Conservative

74.2%;

Score 23; DB 12; Length 239; Pred. No. 1.4e+02; 0; Mismatches 5; Indels

0;

Gaps

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              Q
151 KKSVTAQELD 160
               1 KXXXTXQEXD 10
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Search completed: June Job time: 34.9394 secs 5 2003, 16:00:22

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OM protein - protein search, using sw model
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of hits satisfying chosen parameters:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/BCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
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    US-08-896-933-6
US-08-318-413A-20
US-08-318-413A-20
US-08-318-413A-20
US-08-318-413A-20
US-08-314-235-28
US-09-314-235-27
US-09-314-235-37
US-08-896-933-14
US-08-896-933-15
US-08-896-933-17
US-09-314-235-14
US-09-314-235-15
US-09-314-235-15
US-09-314-235-15
US-09-314-235-16
US-09-314-235-17
US-09-314-235-16
US-09-314-235-17
US-09-314-235-17
US-08-888-207A-381
US-08-888-207A-381
US-08-896-933-29
US-08-896-933-29
US-08-896-933-29
US-08-896-933-29
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CURRENT FILING DATE: 1997-07-18
EARLIER APPLICATION NUMBER: 08/252,978
EARLIER FILING DATE: 1994-06-02
NUMBER OF SEQ ID NOS: 34
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 6
LENGTH: 17
TYPE: PRT
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US-09-314-235-6
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US-08-896-933-6
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US-08-896-933-6
CURRENT APPLICATION NUMBER: US/09/314,235
CURRENT FILING DATE: 1999-05-18
EARLIER APPLICATION NUMBER: 08/896,933
EARLIER APPLICATION NUMBER: 08/252,978
EARLIER FILING DATE: 1994-06-09
EARLIER FILING DATE: 1994-06-01
EARLIER APPLICATION NUMBER: 07/891,718
EARLIER FILING DATE: 1992-06-01
EARLIER FILING DATE: 1992-06-01
EARLIER APPLICATION NUMBER: 07/466,577
EARLIER APPLICATION NUMBER: 07/466,577
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Best Local S
Matches 5
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APPLICANT: Terman, David S.
TITLE OF INVENTION: TUMOR KILLING EFFECTS OF ENTEROTOXINS,
TITLE OF INVENTION: SUPERANTIGENS, AND RELATED COMPOUNDS
FILE REFERENCE: 09629/005004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: Terman, David S.
TITLE OF INVENTION: TUMOR KILLING EFFECTS OF EN
TITLE OF INVENTION: SUPERANTICENS, AND RELATED
FILE REFERENCE: 09629/005002
                                                                                                                                                                                                                                                                                                                                                          Sequence 6, Application Patent No. 6338845
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US-09-144-776B-16
US-08-446-918A-2
US-08-580-806-2
US-09-144-776B-6
US-09-144-776B-6
US-09-144-776B-6
US-09-190-824-2
US-09-190-824-2
US-08-896-933-2
US-08-896-933-1
US-08-896-933-10
US-09-314-235-8
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0; Mismatches
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Best Local Similarity
Thes 5; Conserve
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US-09-314-235-6
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Patent No.
                                                         Matches
                                                                                 Query Match
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LENGTH: 17
TYPE: PRT
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EARLIER FILING DATE: 1989-10-03
                                                                                                                                                                                                           TELEFAX: (212)751-6849 INFORMATION FOR SEQ ID NO:
                                                                                                                       TOPOLOGY: UNKNOWN MOLECULE TYPE: PEPTIDE
                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER: 20
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212)758-4800
                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: MORRY, MARY J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 536
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION:
                                                                                                                                                     TYPE: AMINO ACID
STRANDEDNESS: UNK
                                                                    Poca<sub>T</sub>
                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE: 07-AP
                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                             REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: WORDPERFECT 5.1
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NEW YORK
                                                        Similarity 5; Conserv
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KKSVTAQELD 10
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Pred. No.
                                                                   Score 23; DB
Pred. No. 1.3;
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                                                                                Length 24;
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Best Local Similarity
Matches 5; Conserv
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SEQ ID NO 28
LENGTH: 238
TYPE: PRT
                                                                                      Query Match
Best Local :
                                                                                                                                                                                                           SEQ ID NO 28
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Patent No. 62213
                                                                      Matches
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APPLICANT: Terman, David S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Terman, David S.
TITLE OF INVENTION: TUMOR KILLING EFFECTS OF ENTEROTOXINS,
TITLE OF INVENTION: SUPERANTIGENS, AND RELATED COMPOUNDS
FILE REFERENCE: 09629/005004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/08/896, CURRENT FILING DATE: 1997-07-18
EARLIER APPLICATION NUMBER: 08/252,978
EARLIER FILING DATE: 1994-06-02
                                                                                                                                                                                                                                                                            EARLIER APPLICATION NUMBER: 07/466,577
EARLIER FILING DATE: 1990-01-17
EARLIER APPLICATION NUMBER: 07/416,530
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                                                                                                                                                LENGTH: 238
TYPE: PRT
ORGANISM: Staphylococcus aureas
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150 KKSVTAQELD 159
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APPLICATION NUMBER: 08/252,978
FILING DATE: 1994-06-02
APPLICATION NUMBER: 07/891,718
FILING DATE: 1992-06-01
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Pred. No.
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RESULT 6

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RESULT 8
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TYPE; PRT
; ORGANISM: Staphylococcus aureas
US-08-896-933-27
                                                                                                                                                                                                                                                           ; ORGANISM: Staphylococcus aureas US-09-314-235-27
Sequence 14, Application US/09144776B Patent No. 6399332
                                                                                                                                                                                                      Query Match
Best Local :
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LENGTH: 239
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GENERAL INFORMATION:
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Best Local
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CURRENT FILING DATE: 1997-07-18
EARLIER APPLICATION NUMBER: 08/252,978
EARLIER FILING DATE: 1994-06-02
NUMBER OF SEQ ID NOS: 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/314, CURRENT FILING DATE: 1999-05-18
EARLIER APPLICATION NUMBER: 08/896,933
EARLIER FILING DATE: 1997-07-18
                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: FastSEQ for Windows Version 3.0
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EARLIER EILING DATE: 1991-01-17
EARLIER APPLICATION NUMBER: 07/466,577
EARLIER FILING DATE: 1990-01-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: TUMOR KILLING EFFECTS OF ENTEROTOXINS, TITLE OF INVENTION: SUPERANTIGENS, AND RELATED COMPOUNDS FILE REFERENCE: 09629/005004
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TITLE OF INVENTION: TUMOR KILLING EFFECTS OF ENTEROTOXINS,
TITLE OF INVENTION: SUPERANTIGENS, AND RELATED COMPOUNDS
FILE REFERENCE: 09629/005002
                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EARLIER FILING DATE: 1994-06-02 EARLIER APPLICATION NUMBER: 07/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Terman, David S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PARLIER FILING DATE: 1992-06-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PARLIER APPLICATION NUMBER: 08/252,978
                                                                                                                                                                                                                                                                                               TYPE: PRT
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6221
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                                                                                                                                                                                  Similarity 5; Conserv
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Pred. No.
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Pred. No.
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17;
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; MOLECULE TYPE: Peptide
; SEQUENCE DESCRIPTION: SEQ ID NO: 14:
US-09-144-776B-14
                                                                                                                                                                                                                                                                                                                                                                      US-08-896-933-4
                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: Terman, David S.
TITLE OF INVENTION: TUMOR KILLING EFFECTS OF ENTEROTOXINS,
TITLE OF INVENTION: SUPERAWTIGENS, AND RELATED COMPOUNDS
FILE REFERENCE: 09629/005002
                      SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 4 LENCTH: 17 TYPE: PRT
                                                                                                                                                                                                                                                                                                                          Sequence 4, Application US/08896933 Patent No. 6221351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 74.2%;
Best Local Similarity 50.0%;
Matches 5; Conservative
                                                                                                                            CURRENT APPLICATION NUMBER: US/08/896,933
CURRENT FILING DATE: 1997-07-18
EARLIER APPLICATION NUMBER: 08/252,978
EARLIER FILING DATE: 1994-06-02
                                                                                                             NUMBER OF SEQ ID NOS:
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APPLICANT: Robert G. Ulrich,

Mark A. Olson

Sina Bavari
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ORGANISM: Staphylococcus aureas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION: TELEPHONE: (301) 619-2065
TELEFAX: (301) 619-7714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
ANAB: Charles H. Harris
REGISTRATION NUMBER: 34.6
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US/09/144,776B
FILING DATE: 01-Sep-1998
CLASSIFICATION: <UNKnown>
PRIOR APPLICATION DATA:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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STREET: US Army MRMC -504 Scott Street
MCMR-JA (Charles H. Harris-Pat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER: Apple Macintosh OPERATING SYSTEM: Macintosh SOFTWARE: Microsoft Word 6.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: FORT DETRICK
STATE: MARYLAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STRANDEDNESS: Unknown
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OTHER INFORMATION: Consensus sequences derived from staphylococcus;

OTHER INFORMATION: aureus and streptococcus pyogenes polypeptides
US-08-896-933-14
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Best Local Similarity
...+ches 5; Conserve
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                                                                                 Query Match
Best Local :
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SOFTWARE: FRSTSEQ for Windows Version 3.0
SEQ ID NO 14

LENGTH: 17
                                                                   Matches
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TITLE OF INVENTION: TUMOR KILLING EFFECTS OF ENTEROTOXINS,
TITLE OF INVENTION: SUPERANTIGENS, AND RELATED COMPOUNDS
FILE REFERENCE: 09629/005002
CURRENT APPLICATION NUMBER: U5/08/896,933
CURRENT FILING DATE: 1997-07-18
EARLIER APPLICATION NUMBER: 08/252,978
EARLIER FILING DATE: 1994-06-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent No. 622135
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CURRENT APPLICATION NUMBER: 05/08/896,933

CURRENT FILING DATE: 1997-07-18

EARLIER APPLICATION NUMBER: 08/252,978

EARLIER FILING DATE: 1994-06-02

NUMBER OF SEQ ID NOS: 34
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                                                                                                                                                                                                 ORGANISM: Other
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KKNVTAQELD 10
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                                                               Conservative
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Pred. No.
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Pred. No.
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                    RESULT 14
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Best Local S
Matches 5
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APPLICANT: Terman, David S.
TITLE OF INVENTION: TUMOR KILLING EFFECTS OF ENTEROTOXINS,
TITLE OF INVENTION: SUPERANTIGENS, AND RELATED COMPOUNDS
FILE REFERENCE: 09629/005002
CURRENT APPLICATION NUMBER: US/08/896,933
CURRENT FILING DATE: 1997-07-18
EARLIER APPLICATION NUMBER: 08/252,978
EARLIER FILING DATE: 1994-06-02
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SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 15
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                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 16
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 16, Appl Patent No. 622135
                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NOMBER: US/08/896,933
CURRENT FILING DATE: 1997-07-18
EARLIER APPLICATION NUMBER: 08/252,978
EARLIER FILING DATE: 1994-06-02
                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 34
SOFTWARE: FastSEQ for Windows Version 3.0
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TYPE: PRT
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ORGANISM: Other
                                                                                                                                                                                                                                                OTHER INFORMATION: Consensus sequences derived from staphylococcus OTHER INFORMATION: aureus and streptococcus pyogenes polypeptides
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Local Similarity 50.0%;
ses 5; Conservative
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Pred. No.
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Sequence 17, Application Patent No. 6221351

US/08896933

GENERAL INFORMATION:

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Search completed: June 5, 2003, 15:32:42 Job time: 9.78788 secs
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                                                                                                                                                                                                                                                                                            ; TYPE: PRT ; ORGANISM: Staphylococcus aureas US-09-314-235-4
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SEQ ID NO 17
LENGTH: 17
TYPE: PRT
ORGANISM: Other
FEATURE:
FEATURE:
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EARLIER FILING DATE: 1992-06-01
EARLIER FILING DATE: 1991-01-17
EARLIER FILING DATE: 1991-01-17
EARLIER APPLICATION NUMBER: 07/466,577
EARLIER FILING DATE: 1990-01-17
EARLIER APPLICATION NUMBER: 07/416,530
EARLIER FILING DATE: 1989-10-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 4, Application US/09314235
Patent No. 6338845
                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Terman, David S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 71.0%; Score 22; DB 4; Length 17; Best Local Similarity 50.0%; Pred. No. 1.7; Matches 5; Conservative 0; Mismatches 5; Indels
                                                                                                                                                                                                 Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: TUMOR KILLING EFFECTS OF ENTEROTOXINS, TITLE OF INVENTION: SUPERANTIGENS, AND RELATED COMPOUNDS FILE REFERENCE: 09629/005004
CURRENT APPLICATION NUMBER: US/09/314,235
CURRENT FILING DATE: 1999-05-18
EARLIER APPLICATION NUMBER: 08/896,933
EARLIER APPLICATION NUMBER: 08/896,933
EARLIER FILING DATE: 1997-07-18
EARLIER FILING DATE: 1997-07-18
EARLIER FILING DATE: 1994-06-02
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SOFTWARE: FastSEQ for
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Local Similarity 50.0%;
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Pred. No. 1.
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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.

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Post-processing: Minimum Match 0%
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Listing first 45 summaries
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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Sequence 43487, A Sequence 14, Appl Sequence 14, Appl Sequence 14, Appl Sequence 3, Appli Sequence 4, Appli Sequence 4, Appli Sequence 2, Appli Sequence 5, Appli Sequence 6, Appli Sequence 11, Appli Sequence 11, Appli Sequence 9, Appli Sequence 9, Appli Sequence 9, Appli Sequence 10, Appli Sequence 10, Appli Sequence 10, Appli Sequence 11, Appli Sequence 12, Appli Sequence 13, Appli Sequence 14, Appli Sequence 15, Appli Sequence 16, Appli Sequence 17, Appli Sequence 17, Appli Sequence 18, Appli Sequence 26, Appli Sequence 26, Appli	Description

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Sequence 6, Appl1	Sequence 5, Appli	Sequence 4637; Ap	Sequence 95, Appl	Sequence 5, Appli	Sequence 189, App	Sequence 2, Appl1	Sequence 2, Appli	Sequence 74, Appl ·		38	Sequence 3, Appli	Sequence 13691, A	Sequence 13351, A	Sequence 8, Appli	Sequence 8, Appl1	6, A	Sequence 10, Appl	Sequence 8, Appli	Sequence 6, Appli	Sequence 16, Appl	Sequence 13, Appl	Ġ	Sequence 12, Appl	•	Sequence 10, Appl

ALIGNMENTS

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	US US
PRIOR	RESULT 1 US-09-864-761-43487 Sequence 43487, Application US/09864761 Patent No. US20020048763A1 GENERAL INFORMATION: APPLICANT: Henn, Sharron G. APPLICANT: Henzel, David K. APPLICANT: Chen, Wensheng TITLE OF INVENTION: HUMAN GENOME-DERIVE TITLE OF INVENTION: GENE EXPRESSION AN FILE REFERENCE: Acomica-x-1 CURRENT APPLICATION NUMBER: US/09/864,7 CURRENT FILING DATE: 2001-05-23 PRIOR APPLICATION DATE: 2000-02-04
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APPLICATION NUMBER: US APPLICATION NUMBER: US APPLICATION NUMBER: US APPLICATION NUMBER: US FILING DATE: 2000-08-03 APPLICATION NUMBER: US FILING DATE: 2000-10-04 APPLICATION NUMBER: US FILING DATE: 2001-01-30 APPLICATION NUMBER: PCT FILING DATE: 2001-01-30	1-761-43487 LE 43487, Application US NO. US2002048763A1 LINFORMATION: ANT: Penn, Sharron G. ANT: Hanzel, David K. ANT: Chen, Wensheng OF INVENTION: GENE EXP REFERENCE: Acomica-X-1 VI APPLICATION NUMBER: US APPLICATION UMBER: US APPLICATION UMBER: US APPLICATION UMBER: US APPLICATION UMBER: US
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NUMBER: US 60/207, 2000-05-26 NUMBER: US 09/632, 2000-08-03 1 2000-08-03 2000-09-27 NUMBER: US 60/236, 2000-09-27 NUMBER: PCT/US01/0 2001-01-30	S/0 S/0 PRE PRE S-2 5-2
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NUMBER: US 60/207,456 2000-05-26 NUMBER: US 09/632,366 2000-08-03 NUMBER: GB 24263.6 2000-10-04 NUMBER: US 60/236,359 2000-09-27 NUMBER: PCT/US01/00667 2001-01-30 NUMBER: PCT/US01/00669 2001-01-30 NUMBER: PCT/US01/00669 2001-01-30 NUMBER: PCT/US01/00669 2001-01-30 NUMBER: PCT/US01/00669 2001-01-30 NUMBER: PCT/US01/00668	761-43487 43487, Application US/09864761 5. US20020048763A1 INFORMATION: INFORMATION: WI: Penn, Sharron G. WI: Hanzel, David R. WI: Chen, Wensheng F INVENTION: HUMAN GENOME-DERIVED F INVENTION: GENE EXPRESSION ANAL FERENCE: Aecomica-x-1 APPLICATION NUMBER: US/09/864,761 FILING DATE: 2001-05-23 ILING DATE: US00/180,312 ILING DATE: 2000-02-04
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2001-01-30

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US-08-882-431-14
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SEQ ID NO 43487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: US 09/774,203
PRIOR FILING DATE: 2001-01-29
                              TELEFAX: (301) 619-77 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 49117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                quence 14, Application US/08882431 blication No. US20030009015A1
                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh 7.5
SOFTWARE: Microsoft Word 6.0
CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
               SEQUENCE CHARACTERISTICS:
                                                                                                                                            ATTORNEY/AGENT INFORMATION:
                                                                              TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                              PRIOR APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ITLE OF INVENTION: Bacteria
                                                                                                            REGISTRATION NUMBER: 26,313
                                                                                                                                                                                                                             APPLICATION NUMBER: UP FILING DATE: June 25,
                                                               TELEPHONE:
                                                                                                 REFERENCE/DOCKET NUMBER:
                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                APPLICATION NUMBER:
                                                                                                                                                                                                                 CLASSIFICATION:
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LENGTH:
                                                                                                                                NAME: Moran,
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T: US Army MRMC -504 Scott Street MCMR-JA (John Moran-Patent Atty)
FORT DETRICK
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Sina Bavari
                                          (301) 619-7714
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                                                             (301) 619-2065
                                                                                                                              John
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EXPRESSED IN BONE MARROW, SIGNAL = 0.7
EXPRESSED IN ADULT LIVER, SIGNAL = 0.66
EST_HUMAN HIT: AV703706.1, EVALUE 6.00e+00
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EXPRESSED IN PLAC
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                                                                        ; OTHER INFORMATION: staphylococcal enterotoxin C-1 mutant US-10-002-784A-14
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Best Local Similarity 50.0
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SEQ ID NO 12
LENGTH: 266
TYPE: PRT
ORGANISM: Staphylococcus aureus
                                                                                                                                                                                                                                                                                                                       Sequence 14, Application US/10002784A Publication No. US20030036644A1 GENERAL INFORMATION:
                                                                                                                                                          NUMBER OF SEQ ID NOS: 40
SOFTWARE: Apple Macintosh Microsoft Word 6.0
SEQ ID NO 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent No. US200
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                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/002,784A
CURRENT FILING DATE: 2001-11-26
                                                                                                                                                                                                                                                             APPLICANT: Ulrich, Robert G.
TITLE OF INVENTION: Bacterial Superantigen Vaccines
FILE REFERENCE: 003/233/SAP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 2000-0 NUMBER OF SEQ ID NOS: 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/870,759
CURRENT FILING DATE: 2002-01-14
                                                                                                                              LENGTH: 26
TYPE: PRT
                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 08/882,431; 09/144,776 PRIOR FILING DATE: 97-06-25; 98-09-01
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: TERMAN, David S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILE REFERENCE:
                                                                                                   ORGANISM: Artificial sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATMENT OF NEOPLASTIC DISEASE
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TOPOLOGY: Unk
MOLECULE TYPE:
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les 5; Conservative
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US-09-150-947B-3
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US-09-150-947B-4
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TITLE OF INVENTION: ANTAGONISTS AND VACCINES
FILE REFERENCE: A31967-PCT-USA-A
CURRENT APPLICATION NUMBER: US/09/150,947B
CURRENT FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: PCT/IL97/00438
PRIOR FILING DATE: 1997-12-30
PRIOR APPLICATION NUMBER: ISRAEL 119938
PRIOR FILING DATE: 1996-12-30
NUMBER OF SEQ ID NOS: 12
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                       SOFTWARE:
SEQ ID NO 4
LENGTH: 10
TYPE: PRT
Sequence 1, Application US/10113809 Patent No. US20020177573A1
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Best Local :
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LENGTH: 10
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APPLICANT: Kaempfer, Raymond
APPLICANT: Arad, G11a
TITLE OF INVENTION: BROAD SPECTRUM PYROGENIC EXOTOXINS
TITLE OF INVENTION: ANTAGONISTS AND VACCINES
FILE REFERENCE: A11967-PCT-USA-A
CURRENT ENTING LATE: 1998-09-10
CURRENT FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: PCT/IL97/00438
PRIOR APPLICATION NUMBER: PCT/IL97/00438
PRIOR FILING DATE: 1997-12-30
                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: ISRAEL 119938
PRIOR FILING DATE: 1996-12-30
NUMBER OF SEQ ID NOS: 12
SOFTWARE: FastSEQ for Windows Version 3.0
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Local Similarity 50.0%;
les 5; Conservation
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Pred. No. 4.2;
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; OTHER INFORMATION: Bacterial Toxin Binding Ligand US-10-113-809-1
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APPLICANT: Maschke, Hans, E.
APPLICANT: Maschke, Hans, E.
TITLE OF INVENTION: EXOTOXIN-LIGAND
FILE REFERENCE: MBP-011XX
CURRENT APPLICATION NUMBER: US/10/113,809
CURRENT FILING DATE: 2002-03-29
PRIOR APPLICATION NUMBER: 101 16 042,9-41
PRIOR FILING DATE: 2001-03-30
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APPLICANT: Kaempfer, Raymond
APPLICANT: Arad, Gila
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1
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Best Local 9
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TITLE OF INVENTION: BROAD SPECTRUM PYROGENIC EXCTOXINS TITLE OF INVENTION: ANTAGONISTS AND VACCINES FILE REFERENCE: A31967-PCT-USA-A CURRENT APPLICATION NUMBER: US/09/150,947B CURRENT FILING DATE: 1998-09-10 PRIOR APPLICATION NUMBER: PCT/I197/00438 PRIOR APPLICATION NUMBER: 1977-12-30 PRIOR APPLICATION NUMBER: ISRAEL 119938
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TITLE OF INVENTION: EXOTOXIN-LIGAND
FILE REFERENCE: MEP-011XX
CURRENT APPLICATION NUMBER: US/10/113,809
CURRENT FILING DATE: 2002-03-29
PRIOR APPLICATION NUMBER: 101 16 042.9-41
PRIOR FILING DATE: 2001-03-30
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ORGANISM: Artificial Sequence
FEATURE:
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US-09-150-947B-5
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LENGTH: 12
TYPE: PRT
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Best Local :
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                                                                        CURRENT APPLICATION NUMBER: US/09/150,947B
CURRENT FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: PCT/IL97/00438
PRIOR FILING DATE: 1997-12-30
                            PRIOR APPLICATION NUMBER: ISRAPRIOR FILING DATE: 1996-12-30
                                                                                                                                         TITLE OF INVENTION: BROAD SPECTRUM PYROGENIC EXOTOXINS TITLE OF INVENTION: ANTAGONISTS AND VACCINES FILE REFERENCE: A31967-PCT-USA-A
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PRIOR FILING DATE: 197-12-30
PRIOR APPLICATION NUMBER: ISRAEL 119938
PRIOR FILING DATE: 1996-12-30
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   SOFTWARE:
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TYPE: PRT
ORGANISM: Staphylococcus
FEATURE:
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NUMBER OF SEQ ID NOS:
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LOCATION: (1)...(1).
OTHER INFORMATION: N-lauryl cysteine residue
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Similarity 50.0%;
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for Windows Version 3.0
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Pred. No.
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Pred. No. 5.5;
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RESULT 13
US-09-150-947B-9
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Best Local Similarity
Watches 5; Conserve
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; LOATION: (1)...(1)
; OTHER INFORMATION: N-lauryl cysteine residue
US-09-150-947B-6
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SEQ ID NO 11
                                                                                                                          GENERAL INFORMATION:
                                                                                                                                            Sequence 9, Application US/09150947B Patent No. US20020028211A1
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LENGTH: 13
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APPLICANT: Kaempfer, Raymond
APPLICANT: Arad, Gila
TITLE OF INVENTION: BROAD SPECTRUM PYROGENIC
TITLE OF INVENTION: ANTAGONISTS AND VACCINES
FILE REFERENCE: A31967-PCT-OSA-A
CURRENT APPLICATION NUMBER: US/09/150,947B
CURRENT FILING DATE: 1998-09-10
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CURRENT APPLICATION NUMBER: US/09/150,947B
CURRENT FILING DATE: 1998-09-10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 1
TYPE: PRT
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LOCATION: (13)...(13)
OTHER INFORMATION: D-alanine
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LOCATION: (1)...(1)
OTHER INFORMATION: N-acetyl group
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nes 5; Conserv
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Pred. No.
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Pred. No. 5
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APPLICATION NUMBER: FILING DATE: 1997

PCT/IL97/00438

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US-09-150-947B-7
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SEQ ID NO 10
LENGTH: 14
                                                                  Sequence 7, Application US/09150947B Patent No. US20020028211A1 GENERAL INFORMATION:
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Best Local Similarity
Matches 5; Conserva
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LENCTH: 14
TYPE: PRT
ORGANISM: Staphylococcus aureus
FEATURE:
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NAME/KEY: MOD_RES
LOCATION: (1)...(1)
OTHER INFORMATION: D-alanine
NAME/KEY: MOD_RES
LOCATION: (14)...(14)
OTHER INFORMATION: D-alanine
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APPLICANT: Kaempfer, Raymond
APPLICANT: Arad, Gila
TITLE OF INVENTION: BROAD SPECTRUM PYROGENIC EXOTOXINS
TITLE OF INVENTION: ANTAGONISTS AND VACCINES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: BROAD SPECTRUM PYROGENIC EXOTOXINS TITLE OF INVENTION: ANTAGONISTS AND VACCINES FILE REFERENCE: A31967-PCT-USA-A CURRENT APPLICATION NUMBER: US/09/150,947B CURRENT FILING DATE: 1998-09-10
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NUMBER OF SEQ ID NOS: 1
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PRIOR FILING DATE: 1996-12-30
NUMBER OF SEQ ID NOS: 12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT ORGANISM: Staphylococcus aureus
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mes 5; Conserv
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Pred. No.
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CURRENT FILING DATE: 1998-09-10; PRIOR APPLICATION NUMBER: US/09/150,947B; PRIOR APPLICATION NUMBER: PCT/TTTTPRIOR FILING DATE: 1000 PRIOR FILING DATE: 1000 PRIOR APPLICATION NUMBER: PCT/TTTTPRIOR APPLICATION DATE: 1000 PRIOR PRIOR DATE: 1000 PRIOR DATE: 1000 PRIOR DATE: 1000 PRIOR PRIOR DATE: 1000 PRIOR DATE: 1000 PRIOR PRIOR PRIOR DATE: 1000 PRIOR PRIOR DATE: 1000 PRIOR PRIOR PRIOR DATE: 1000 PRIOR PRI
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SEQ ID NO 7
LENGTH: 16
TYPE: PRT
ROBANISM: Staphylococcus aureus
US-09-150-947B-7
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Best Local Similarity 50.0
Matches 5; Conservative
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Search completed: June 5, 2003, 15:49:02 Job time: 13.1212 secs

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283224 seqs, 96134422 residues
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Minimum Maximum DB DB seq length: 0 length: 2000000000

Total number of hits satisfying chosen parameters:

283224

Post-processing: Minimum Match 08
Maximum Match 10

Listing first 45 100% summaries

Database pir1:*
pir2:*
pir3:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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262	266	260	258	251	251	247	242	240	239	236	236	236	184	136	102	3212	586	572	568	566	565	266	266	266	604	603	602	549	Length 1	
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RESULT RRNZP3

R;Spriggs; M.K.; Collins, P.L.
J. Gen. Virol. 67, 2705-2719, 1986
A;Title: Sequence analysis of the P and C protein genes
A;Reference number: A92793; MUID:87085488; PMID:3025346
A;Accession: A27010

of human parainfluenza virus

Accession: A27010

polymerase-associated nucleocapsid phosphoprotein - parainfluenza virus type 3 C;Species: parainfluenza virus type 3 A;Note: host Homo sapiens (man) C;Date: 31-Mar-1988 #sequence_revision 31-Mar-1988 #text_change 24-Jul-1997

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C; Genetics:

C; Superfamily: parainfluenza virus polymerase-associated nucleocapsid phosphoprotein

A; Molecule type: mRNA A; Residues: 1-602 <SPR> C; Comment: This protein

protein

may be a component of the active polymerase

44444 5444 6544 6544 6544 6544 6544 654	30 31 32
71.0 71.0 71.0 71.0 71.0 71.0 71.0 71.0	71.0 71.0 71.0 71.0
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G71647 F97865 F797865 F797865 F705259 T39229 I37292 I3729 I3	F97975 DEBYG2 JC5787 T38408
. # . #	hypothetical prote glyceraldehyde-3-p ribonuclease H (EC hypothetical prote

ALIGNMENTS

R;Theologis, A; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; White, O.; Alon Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar, ansen, N.F.; Hughes, B.; Hulzar, L.

Nature 408, 816-820, 2000

A;Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, E.; Kim, A; Lit, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Maiti, R.; Marzia Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.

A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallo ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.

A;Title: Sequence and analysis of chromosome 1 of the plant Arabidopsis.

A;Accession: E86337

A;Accession: E86337 В Š A; Map position: 1 hypothetical protein F14O10.3 - Arabidopsis thaliana C;Species: Arabidopsis thaliana (mouse-ear cress) C;Date: 02-Mar_2001 #sequence_revision 02-Mar-2001 #text_change 31-Dec-2001 A; Cross-references: A; Molecule type: DNA A; Residues: 1-549 <STO> C; Accession: E86337 Status: preliminary Query Match Genetics: Matches Local 27 KISTTGQETD 36 1 KXXXTXQEXD 10 Similarity 5; Conserv DNA Conservative GB:AE005172; NID:g9558589; PIDN:AAF88152.1; 77.48; 50.08; 0; Score 24; Pred. No. DB <u>ب</u> Ġ Length 549; Indels GSPDB:GN00141 0; Gaps 0;

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C;Superfamil
C;Keywords:
                                                                                                                                                                                                                   A:Cross-references: GB:M14890
R:Luk, D.; Sanchez, A.; Banerjee, A.K.
Virology 153, 318-325, 1986
A;Title: Messenger RNA encoding the phosphoprotein (P) gene
A:Reference number: A94343; MUID:86291173; PMID:3016995
A:Accession: A24189
                                                                                                                               C; Genetics:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C; Species: parainfluenza virus
A; Note: host Homo sapiens (man)
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A;Title: Molecular cloning and sequence analysis of the A;Reference number: A94348; MUID:87044104; PMID:3022477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C;Date: 30-Jun-1988 #sequence_revision 30-Jun-1988 #text_change
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                                                                                                                                              A; Note: this sequence has been corrected in reference A94355
C; Comment: This protein may be a component of the active polymerase.
                                                                                                                                                                                     A; Residues: 1-603, 'AKDQIKKTTPNK' <LU2>
                                                                                                                                                                                                        A; Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                     A; Molecule type: mRNA
A; Residues: 1-604 <LU1>
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                                                                                                                                                                                                                                                                                                                                                                                               A; Contents: erratum
                                                                                                                                                                                                                                                                                                                                                                                                                A; Reference number: A94355
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type: mRNA
A; Residues: 1-603 <GAL>
C; Comment: The RNA sequence
C; Comment: This protein may
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Accession: A26896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C; Accession: A26896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A; Note:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C; Keywords: nucleocapsid;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     polymerase-associated nucleocapsid phosphoprotein (version
   Best Local
Matches
                                                                                            Superfamily: parainfluenza virus polymerase-associated nucleocapsid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Date: 31-Mar-
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        226 KSSSTHQEDD 235
                                                                           nucleocapsid;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ly: parainfluenza nucleocapsid; pho
     Similarity 5; Conser
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5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       988 #sequence_revision
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60, 1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    77.48;
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50.08;
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                   50.0%;
                                                                           phosphoprotein
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                                        77.48;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      virus polymerase-associated nucleocapsid
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 Score 24; DB Pred. No. 69; 0; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 24;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 24;
Pred. No.
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                                      Length 604;
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                                                                                                                                                                                                                                                            of human parainfluenza
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                                                                                                         A; Title: Nucleotide sequence of the type C-3 A; Reference number: A33866; MUID:89327174; PA; A; Accession: A33866
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                                                     A; Molecule type: DNA
A; Residues: 1-266 <COU>
                                                                                                                                                                                                    A; Molecule type: protein A; Residues: 28-66 < BOH2>
                                                                                                                                                                                                                                       A; Residues: 1-266 <BOH>
A; Accession: B60114
                                                                                                                                                                                                                                                                                                                R;Bohach, G.A.; Scinite: 2849-2252, 1989
Infect. Immun. 57, 2249-2252, 1989
A;Title: Conservation of the biologically active portions
A;Title: Conservation of the biologically active portions
                                                                                                                                                                                                                                                                                                                                                                                   C;Species: Staphylococcus aureus
C;Date: 10-Nov-1992 #sequence_revision 10-Nov-1992 #text_change 16-Jul-1999
C;Accession: A60114; B60114; A33866
R;Bohach, G.A.; Schlievert, P.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                enterotoxin C-2 precursor - Staphylococcus aureus N;Alternate names: enterotoxin C-3 precursor
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                                    A; Cross-references:
                                                                                          A;Status: preliminary
                                                                                                                                                                 R;Couch, J.L.; Betley, M.J. J. Bacteriol. 171, 4507-4510,
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                                                                                                                                                                                                                                                                                               A; Status: not compared with
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C;Reywords: enterotoxin
F;1-27/Domain: signal sequence #status predicted <SIG>F;1-28-266/Product: enterotoxin C-1 #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Reference number: A01816; A; Accession: A01816
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C; Date: 15-Nov-
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Infect. Immun. 57,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             F;120-137/Disulfide bonds: #status experimental
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A;Residues: 28-75,'IL',78-176,'N',178-266 <SCH>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: DNA
A; Residues: 1-266 <BOH>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
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5; Conserv
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                                    GB:M28364; NID:g153003; PIDN:AAA26624.1;
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    Staphylococcus aureus

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Pred. No.
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                                                                                                                               -3 staphylococcal enterotoxin 
PMID: 2473979
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of

staphylococcal enterotox

PID:g153004

gene suggests

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R;Bohach, G.A.; Schlievert, P.M.
Mol. Gen. Genet. 209, 15-20, 1987
Mol. Gen. Genet. 209, 15-20, 1987
A;Title: Nucleotide sequence of the staphylococcal enterotoxin
A;Reference number: S06356; MUID:88038352; PMID:2823067
A;Accession: S06356
                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Cross-references: EMBL:X05815; NID:g46566; PIDN:CAA29260.1;
                                                                                                                                                                                                                                                                                                                                                wacid sequence of Staphylococcal enterotoxin MUID:83213327; PMID:6189824
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                                                 Length 266;
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RESULT
AB3061
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B.; Laub,
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C;Date: 19-Mar:1997 #sequence_res
C;Accession: S11885
R;Hovde, C.J.; Hackett, S.P.; Bol
     30S ribosomal C; Species: Agı
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C;Date: 20-Apr-2001 #sequence_revision 20-Apr-2001 #text_change 10-May-2001 C;Accession: A87694
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mol. Gen. Genet. 220, 329-333, 1990
A;Title: Nucleotide sequence of the staphylococcal enterotoxin
A;Reference number: S11885; MUID:90220508; PMID:2325627
A;Accession: S11885
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F;1-27/Domain: signal sequence #status predicted
F;28-266/Product: enterotoxin C-2 #status predict
                                                                                                                                                                                                                                                                                                                                A; Molecule type: DNA
A; Residues: 1-565 <S
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A; Residues: 1-266 < H
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                                                                                                                                                                                                                                                                                                                                                                                                                  A; Title: Complete Genome Sequence of Caulobacter crescentus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ribosomal protein S1 [imported] - Caulobacter crescentus
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Best Local !
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Best Local :
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   nal protein S1
Agrobacterium
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                                                                                                                                                                                  Similarity 5; Conserv
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                                                                                                               KIVSTSQEVD 335
                                                                                                                                                 KXXXTXQEXD 10
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                                                                                                                                                                                                                                                       Escherichia coli ribosomal protein S1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 997 #sequence_revision 19-Mar-1997 #text_change 16-Jul-1999
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50.0%;
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       tumefaciens
                      [imported] -
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Pred. No.
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                      Agrobacterium tumefaciens
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                    (strain C58, Dupont)
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R;Goodner, B.; Hinkle, G.; Gattung, S.; Miller, N.; Blanchar, A.; Liu, F.; Wollam, C.; Allinger, M.; Doughty, D.; Scott, Science 294, 2323-2328, 2001
A;Title: Genome Sequence of the Plant Pathogen and Biotechnon, R;Reference number: A97359; PMID:11743194
A;Accession: E98225
                                                                                                          C; Accession:
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E98225

the Plant Pathogen and Biotechnology Agent Agrobacterium

#text_change 11-Jan-2002

(strain C58,

Cereon)

Blanchard, M.; Qurollo,

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Lappas,

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Goldm

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C;Superfamily: Escherichia coli ribosomal protein S1 (Keywords: duplication; protein blosynthesis; ribosc F;196-453/Domain: RNA binding #status predicted <RNA F;196-279,280-366,367-453/Region: duplication
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R;Schnier, J.; Thamm, S.; Lurz, R.; Hussain, A.; Faist, G.; DODITHISAL, D. R;Schnier, J.; Thamm, S.; Lurz, R.; Hussain, A.; Faist, G.; DODITHISAL, D. Nucleic Acids Res. 16, 3075-3089, 1988

Nucleic Acids Res. 16, 3075-3089, 1988

A;Title: Cloning and characterization of a gene from Rhizobium melilotii 2011 coding A;Reference number: S01055; MUID:88217521; PMID:3368316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; Karp, P.; Romero, P.; Zhang, S. Science 294, 2317-2323, 2001 A; Authors: Yoo, H.; Tao, Y.; Biddle,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   R; Wood, D.W.; Setubal, J.C.; Kaul, R.; Monks, D.; erage, G.; Gillet, W.; Grant, C.; Guenthner, D.;
RESULT 11

198225

208 ribosomal protein S1 [imported] - Agrobacterium tumefaciens

C;Species: Agrobacterium tumefaciens

C;Date: 22-Oct-2001 #sequence_revision 22-Oct-2001 #text_change
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A; Accession: AB3061
A; Status: preliminary
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: DNA
A; Residues: 1-568 <SCH>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ribosomal protein S1 - Rhizobium meliloti
C;Species: Rhizobium meliloti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Cross-references: GB:AE008689; PIDN:AAL44904.1; A;Experimental source: strain C58 (Dupont)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Molecule type: DNA
A:Residues: 1-566 <KUR>
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                                                                                                                                                                                                                                                                                                                                                                                                                   ;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;Cross-references:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;Date: 31-Dec-1990
;Accession: S01055
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;Title: The Genome of the Natural Genetic Engineer Agrobacterium tumefaciens C58;Reference number: AB2577; PMID:11743193
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Best Local :
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Best Local
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5; Conserve
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5; Conserv
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e from Fig. 5
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Pred. No. 1
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                                                                                                                                                                                                                                                      Pred.
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No. 1.2e+02;
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D.; Kutyavin, T.; Levy, R.; Ll, M.; N
                                                                                                                                                                                                                                                                                                                                                     ribosome;
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A;Residues: 1-3212 <WIL>
A;Residues: 1-3212 <WIL>
A;Cross-references: EMBL: 280220; PIDN: CAB02304.1; GSPDB: GN00019; CESP: T08G11.1
A: Fxperimental source: clone T08G11
                                                                                                       submitted to the EMBL Data Library, September 1996
A;Reference number: Z19925
A;Accession: T24692
A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                    hypothetical protein T08G11.1 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C;Comment: The steroid hormones and their receptors are involved in the regulation of el C;Comment: In the absence of ligand, steroid hormone receptors are thought to be weakly omplex appears to recognize discrete DAN sequences upstream of transcriptional start sit C;Superfamily: estrogen receptor; erbA transforming protein homology C;Keywords: DNA binding; nucleus; phosphoprotein; steroid binding; steroid hormone receptor: F;1-174/Domain: amino-terminal <NH2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Title: The Xenopus laevis A; Reference number: A40907; A; Accession: A40907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              estrogen receptor - African clawed frog
C;Species: Xenopus laevis (African clawed frog)
C;Date: 28-Feb-1992 #sequence_revision 14-Jul-1994 #text_change 15-Jun-1996
C;Accession: A40907
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A;Molecule type: DNA
A;Residues: 1-572 <KUR>
                                                                                              A; Molecule
                                                                                                                                                                                                   R; Dobson,
                                                                                                                                                                                                                         C; Accession: T24692
                                                                                                                                                                                                                                                                                                                                  RESULT 13
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A; Residues: 1-586 <WEI>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Map position:
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Best Local S
Matches 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ller, I.J.; Lew, D.; Shapiro, D.J. Endocrinol. 1, 355-362, 1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity les 5; Conserv
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5; Conserv
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                                                                                              DNA
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Ra, A.; Mizutani-Ui, Y.; Kobayashi, N.; Sawano, T.; Inoue, F.
ma, A.; Mizutani-Ui, Y.; Kobayashi, N.; Havashi, H.; Hi
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                                                                                                                 A; Experimental source: C; Genetics:
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A; Residues: 1-136 < KUR>
                                                                                                                                                                                                            A;Title: Whole genome sequencing of meticillin-resistant Stapylococcus aureus A;Reference number: A89758; MUID:21311952; PMID:11418146
A;Accession: A89969
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C;Date: 10-May-2001 #sequence_revision 10-May-2001 #text_change 22-Oct-2001
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C; Species: Staphylococcus aureus
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C;Species: Synechocystis sp.
A;Variety: PCC 6803
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Lancet 357, 1225-1240, 2001
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GenCore version
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Compugen Ltd.
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OM protein protein search, using sw model

Run on: June 5, 2003, 15:34:07; Search time 6.51515 Seconds (without alignments) 63.661 Million cell updates/sec

Title: Perfect score: US-09-150-947F-13 1 KXXXTXQEXD 10

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0 length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

SwissProt_40:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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MEDLINE-87044104; PubMed=3022477; Galinski M.S., Mink M.A., Lambert D.M., Wechsler S.L., Pons W.M.; "Molecular cloning and sequence analysis of the human parainfluenza 3 virus mRNA encoding the P and C proteins."; Virology 155:46-60(1986). SEQUENCE FROM N.A. MEDLINE-87085488; PubMed=3025346; SEQUENCE FROM N.A. MEDLINE-87085488; PubMed=3025346; SPRIGGS M.K., Collins P.L.; "Sequence analysis of the P and C protein genes of human parainfluenza virus type 3: patterns of amino acid sequence homology among paramyxovirus proteins."; J. Gen. Virol. 67:2705-2719(1986). 1. FUNCTION: THIS PROTEIN IS PROBABLY A COMPONENT OF THE ACTIVE POLYMERASE. IT MAY FUNCTION IN TEMPLATE BINDING. -1- CATALYTIC ACTIVITY: N nucleoside triphosphate = N diphosphate + This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation of the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch). EMBL; M14890; AAAA6866.1; ALT_SEQ. EMBL; M14932; AAAA6866.1; ALT_SEQ. EMBL; M14932; AAAA6866.1;	LT 1 PI3144 PI3144 PRRPP_PI3H4 STANDARD; PRT; 604 AA. P06162; 01-JAN-1988 (Rel. 06, Created) 01-AUG-1988 (Rel. 08, Last sequence update) 15-JUN-2002 (Rel. 41, Last sequence update) 15-JUN-2002 (Rel. 41, Last annotation update) RNA polymerase alpha subunit (EC 2.7.7.48) (Nucleocapsid phosphoprotein). P. Human parainfluenza 3 virus (strain NIH 47885). Viruses; ssRNA negative-strand viruses; Mononegavirales; Paramyxoviridae; Paramyxovirinae; Respirovirus. NCBI_TaxID-11217; SEQUENCE FROM N.A. MEDLINE-86291173; PubMed-3016995; Luk D., Sanchez A., Banerjee A.K.; "Messenger RNA encoding the phosphoprotein (P) gene of human parainfluenza virus 3 is bicistronic."; Virology 153:318-325(1986). REVISIONS. Luk D., Sanchez A., Banerjee A.K.; Virology 156:193-194(1987). SEQUENCE FROM N.A.

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pfam; PF02876; Stap_Strp_tox_C; 1.
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                                                                                                                                                                                                                                                                                                                                                      SUBCELLULAR LOCATION: Secreted.

DISEASE: STAPHYLOCOCCAL ENTEROTOXINS CAUSE THE INTOXICATION STAPHYLOCOCCAL FOOD POISONING SYNDROME.

SIMILARITY: BELONGS TO THE STAPHYLOCOCCAL/STREPTOCOCCAL TOXIN
                                                                                                                           A01816;
S06356;
                                                                                                                                                                                                                                                                     European
                                                                                                                                                                                                                                                                                                                                                                                                                          idt J.J., Spero L.;
complete amino acid sequence
iol. Chem. 258:6300-6306(1983)
                                                                                                                                                                                                                                                                                                        SWISS-PROT entry is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gen. Genet.
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5; Conserv
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                                                                                                                                                                                             requires a license agreement (S
in email to license@isb-sib.ch).
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806; Paramyxo_P; 1.
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                                                                                                                                                                                                                                                                 ROT entry is copyright. It is produced through a Swiss Institute of Bioinformatics and the EMBI Bioinformatics Institute. There are no restrice
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                                                                                                                         S06356.
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                                                                                                                                             ENSAC1.
                                                                                                                                                              CAA29260.1;
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 STAPH_STREP_TOXIN_1;
STAPH_STREP_TOXIN_2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PubMed=6189824;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PubMed=2823067;
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Matches 5
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SIGNAL
CHAIN
DISULFID 1
CONFLICT 1
                                                                                                                                                                                                                                                                                                                         COMPARAGE MEDITARE-97344373; PubMed-9191070;
Schad E.M., Papageorgiou A.C., Svensson L.A., Acharya K.R.
"A structural and functional comparison of staphylococcal
"Tarretowing A and C2 reveals remarkable similarity and
InterPro; IPR001961; Stap/Strep.
pfam; PF011123; Stap_Strp_toxin;
pfam; PF02876; Stap_Strp_tox_C;
pRINTS; PR00279; BACTRLTOXIN.
PROSITE; PS00277; STAPH_STREP_T0
                                                                                                                                                                                                                                                                              dissimilarity.";
J. Mol. Biol. 269:27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Crystal structure of the superantigen enterotoxin C2 Staphylococcus aureus reveals a zinc-binding site."; Structure 3:769-779(1995).
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Swaminathan S., Furey W.F. Jr.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE-96027099; PubMed-7582894; Papageorgiou A.C., Acharya K.R.,
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15-JUN-2002
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Bohach G.A., Schlievert P.M
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                                                                                                                                                                            DISEASE: STAPHYLOCOCCAL ENTEROTOXINS CAUSE THE INTOXICATION STAPHYLOCOCCAL FOOD POISONING SYNDROME.
SIMILARITY: BELONGS TO THE STAPHYLOCOCCAL/STREPTOCOCCAL TOXIN
                                                                                                                                                                                                                                         COFACTOR: Binds 1 zinc ion per
for the toxin interaction with
SUBCELLULAR LOCATION: Secreted
                                                                                                  1STE; 23-DEC-96.
1SE2; 08-MAR-96.
                                                                                                                                           A60114; A60114
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5; Conserv
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type C-2 p
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                                                                                                                                                                                                                                                                                                   269:270-280(1997).
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57:2249-2252(1989)
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Pred. No.
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MEDLINE-21311952; PubMed-11418146;

KUroda M., Ohta T., Uchiyama I., Baba T., Yuzawa H., Kobayashi
Cui L., Oguchi A., Aoki K.-I., Nagai Y., Lian J.-Q., Ito T.,
Cui L., Oguchi A., Aoki K.-I., Nagai Y., Lian J.-Q., Ito T.,
Kanamori M., Matsumaru H., Maruyama A., Murakami H., Hosoyama
Mizutani-Ui Y., Takahashi N.K., Sawano T., Inoue R.-I., Kaito
Sekimizu K., Hirakawa H., Kuhara S., Goto S., Yabuzaki J.,
Kanehisa M., Yamashita A., Oshima K., Furuya K., Yoshino C., S
Hattori M., Ogasawara N., Hayashi H., Hiramatsu K.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-NOV-1991 (Rel. 20, Created)
01-NOV-1991 (Rel. 20, Last sequ
15-JUN-2002 (Rel. 41, Last anno
Enterotoxin type C-3 precursor
ENTC3 OR SAV2009 OR SA1817.
                                                                                                                                                                                                    Fields B.A., Malchiodi E.L., Li H., Ysern X., Stauf Schllevert P.M., Karjalainen K., Mariuzza R.A.; "Crystal structure of a T-cell receptor beta-chain
                                                                                                                                                                                                                                                                                                                                                                       Hovde C.J., Hackett S.P., Bohach G.A.;
"Nucleotide sequence of the staphylococcal enterotoxin sequence comparison of all three type C staphylococcal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Staphylococcus aureus.
Bacteria; Firmicutes; Bacillales; Staphylococcus
MCBI_TaxID=158878, 158879, 1280;
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MEDLINE-97064178; PubMed-89
                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=90220508; PubMed=2325627;
Hovde C.J., Hackett S.P., Bohach G.A.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
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                                                                                                  SUBCELLULAR LOCATION: Secreted DISEASE: STAPHYLOCOCCAL ENTERO'S STAPHYLOCOCCAL FOOD POISONING ST
                                                                                SIMILARITY:
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5; Conserv
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                                                                                  BELONGS
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TO THE STAPHYLOCOCCAL/STREPTOCOCCAL TOXIN
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Ba Boistard P., Becker A., Boutry M., Cadleu E., Dreano S., Gloux S.,
A Boistard P., Becker A., Boutry M., Cadleu E., Dreano S., Gloux S.,
A Boistard P., Becker A., Boutry M., Cadleu E., Delaure V., Masuy D.,
A Pohl T., Portetelle D., Puehler A., Purnelle B., Ramsperger U.,
A Renard C., Thebault P., Vandenbol M., Weidner S., Gallbert F.;
"Analysis of the chromosome sequence of the legume symbiont
Sinorhizobium meliloti strain 1021.";
"Analysis of the chromosome sequence of the legume symbiont
Sinorhizobium meliloti strain 1021.";
Proc. Natl. Acad. Sci. U.S.A. 98:9877-9882(2001).
LL Proc. Natl. Acad. Sci. U.S.A. 98:9877-9882(2001)
Proc. Natl. Acad. Sci. U.S.A. 98:9877-9882(2001).
C-1- FUNCTION FOINT. IT IS NEEDED TO TRANSLATE MENA WITH A SHORT SHINE-DALGRANO (SD) PURRIME-RICH SEQUENCE (BY SIMILARITY).
C-1- SIMILARITY: BELONGS TO THE S1P FAMILY OF RIBOSOMAL PROTEINS.
C-1- SIMILARITY: CONTAINS 6 S1 MOTIF DOMAINS.
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[2]
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30-MAY-2000 (Rel. 39, Last sequence up
15-JUN-2002 (Rel. 41, Last annotation
30s ribosomal protein S1
RPSA OR R00255 OR SMC00335.
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Pfam; PF001123; Stap_Strp_toxin; 1.

Pfam; PF00276; Stap_Strp_tox_C; 1.

PRINTS; PR00279; BACTRLTOXIN.

PROSITE; PS00277; STAPH_STREP_TOXIN_1; 1.

PROSITE; PS00278; STAPH_STREP_TOXIN_2; 1.
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EMBL; AP003155; BAB43097.1; -.
EMBL; X51661; CAA35972.1; -.
PIR; S11885; S11885
PDB; IJCK; 12-NOV-97.
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                                                                                                                                                                                                                                                                                                                                                    MEDLINE=21396507; PubMed=11481430;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Cloning and characterization of a gene coding for ribosomal protein Sl."; Nucleic Acids Res. 16:3075-3089(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dobrinski B.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
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                                      Weller I.J., Lew D., Shapiro D.J.;

"The Xenopus laevis estrogen receptor: sequence homology with human and avian receptors and identification of multiple estrogen receptor messenger ribonucleic acids.";

MO1. Endocrinol. 1:355-362(1987).

-!- FUNCTION: THE STEROID HORNONES AND THEIR RECEPTORS ARE INVOLVED IN THE REGULATION OF EURARYOTIC GENE EXPRESSION AND AFFECT CELLULAR PROLIFERATION AND DIFFERENTIATION IN TARGET TISSUES.
-!- SUBUNIT: BINDS DNA AS A HOMODIMER. CAN FORM A HETERODIMER WITH I BETA (BY SIMILARITY).
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15-JUL-1999 (Rel. 38, Last sequence update)
15-JUL-1999 (Rel. 38, Last annotation update)
15-JUL-1999 (Rel. 38, Last annotation update)
Estrogen receptor (ER) (Estradiol receptor) (I
ESRI OR NR3AI OR ESR.
Xenopus laevis (African clawed frog).
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P81559;
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Amphibia; Batrachia; Anura; M
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the Euro
Submitted (AUG-1986) to the EMBL/GenBank/DDBJ databases [3]
                                     SEQUENCE FROM N.A.

Eichenlaub R.;

Eichenlaub R.;

F plasmid DNA complete mini-F region (F coordinates 40.301F
49.869F).";
                                                                                                                                                            Murotsu T., Matsubara K., Sugisaki H., Takanami M.;
"Nine unique repeating sequences in a region essential freplication and incompatibility of the mini-F plasmid.";
                                                                                                                                                                                                                         SEQUENCE FROM N.A. MEDLINE-82051318;
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21-JUL-1986 (Rel. 01,
15-JUN-2002 (Rel. 41,
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SMART; SM00399; ZnF_C
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InterPro; IPR001628;
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                                                                                                                                             Gene 15:257-271(1981).
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"Direct repeats of the F plasmid incompatibility.";
Cell 24:687-694(1981).
                                                                                                                                                                                                                                                                              EcoGene; EG40058; repE.
InterPro; IPR000525; Initr RepB.
Pfam; PF01051; RepB. protein; 1.
Plasmid; DNA replication; Plasmid
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"The repeated sequences (incB) preceding the protein 
plasmid mini-F are essential for replication.";
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Tolun A., Helinski D.R.;
"Direct repeate of
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EXOTOXIN TYPE

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InterPro; IPR001961; Stap/Strep_toxin.

Pfam; PF01123; Stap_Strp_toxin; 1.

Pfam; PF02876; Stap_Strp_tox.C; 1.

PRINTS; PR00279; BACTRITOXIN.

PROSITE; PS00277; STAPH_STREP_TOXIN_1; 1.

PROSITE; PS00278; STAPH_STREP_TOXIN_2; 1

TOXIn; Signal; 3D-structure.
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Papageorgiou A.C., Collins C.M., Gutman D.M., Kline J.B.,
O'Brien S.M., Tranter H.S., Acharya K.R.;
"Structural basis for the recognition of superantigen streptococcal
pyrogenic exotoxin A (SpeAl) by MHC class II molecules and T-cell
receptors.";
EMBO J. 18:9-21(1999)
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STRAIN=MGAS8232 / Serotype M18;

MEDLINE=21927593; PubMed=11917108;

Smoot J.C.; Barbian K.D., Van Gompel J.J., Smoot L.M., Chaussee M.S.,

Sylva G.L., Sturdevant D.E., Ricklefs S.M., Porcella S.F.,

Sylva G.L., Sturdevant D.E., Ricklefs S.M., Porcella S.F.,

Sylva G.L., Sturdevant D.E., Smith T.M., Zhang Q.,

Sylva G.L., Sturdevant D.E., Campbell D.S., Smith T.M., Zhang Q.,

Rapur V., Daly J.A., Veasy L.G., Musser J.M.;

"Genome sequence and comparative microarray analysis of serotype M18

"Genome sequence and comparative microarray analysis of serotype M18

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11, X03929; CAA27568.1; -.
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12; A26152; A26152.
13; S29659; S29659.
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Swaminathan S., Furey W.F. Jr., Pletcher
"Crystal structure of staphylococcal ente
Nature 359:801-806(1992).
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MEDLLINE-85298255; PubMed-3898073;

Ranelli D.M., Jones C.L., Johns M.B., Mussey G.J.

"Molecular cloning of staphylococcal enterotoxin

Escherichia coli and Staphylococcus aureus.";

Proc. Natl. Acad. Sci. U.S.A. 82:5850-5854(1985).
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 X-RAY CRYSTALLOGRAPHY (2.4 ANGSTROMS) MEDLINE=99096298; PubMed=9881971;
                                               "Three-dimensional structure molecule complexed with super Nature 368:711-718(1994).
                                                                                                Jardetzky T.S., Brown J.H.,
Chi Y.I., Stauffacher C., S
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MEDLINE=71007902; PubMed=5470821;
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RESULT 10 G3P3_YEAST ID G3P3_YEAST AC P00359; DT 21-JUL-1986 DT 01-NOV-1995

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PDB; 3SEB; 27-MAY-98.
PDB; 1SE3; 16-JUN-97.
PDB; 1SE3; 15-OCT-97.
PDB; 1SEB; 04-MAR-99.
InterPro; IPR001961; Stap/Strep_toxin.
Pfam; PF01123; Stap_Strp_toxic; 1.
Pfam; PF02876; Stap_Strp_toxIN.
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"Crystal structure of inicrobial superantigen staphylococcal
enterotoxin B at 1.5-A resolution: implications for superanti
recognition by MHC class II molecules and T-cell receptors.";
J. Mol. Biol. 277:61-79(1998).
-i- SUBCELLULAR LOCATION: Secreted.
                                                                                SEQUENCE
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                                                                                                                                                                                                                   SIGNAL
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MEDLINE=98181012; PubMed=9514739;
Papageorgiou A.C., Tranter H.S., Acha
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PS00278; STAPH_STREP_TOXIN_2; 1.
xin; Toxin; Signal; Superantigen;
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TO THE STAPHYLOCOCCAL/STREPTOCOCCAL
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EMBL; V01300; CAA24607.1; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    by microsequencing of in-gel trypsin generated peptid
Electrophoresis 16:149-156(1995).
-:- CATALYTIC ACTIVITY: D-glyceraldehyde 3-phosphate
NAD(+) = 3-phospho-D-glyceroyl phosphate + NADH.
-:- PATHWAY: Second phase of glycolysis; first step.
                       pfam; PF00044; gpdh; 1.
pfam; PF02800; gpdh_C; 1.
prinTs; PF00078; G3PDHDRGNASE.
PROSITE; PS00071; GAPDH; 1.
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SGD; S0003424; TDH3.
InterPro; IPR000173; GAP_dhdrogenase
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                                                                                                                                                                                                                                                                                                                                                                                                                                     modified and this statement is not removed. entitles requires a license agreement (See
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Norbeck J., Blomberg A.; "Gene linkage of two-dimensional polyacrylamide gel electrophoresis resolved proteins from isogene families in Saccharomyces cerevisiae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN-ATCC 38531 / Y41, and SKQ2N; MEDLINE-95255188; PubMed-7737086;
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STRAIN-ATCC 38531
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Garrels J.I., Futcher B., Kobayashi R., Latter G.I., Schwender I
Volpe T., Warner J.R., McLaughlin C.S.;
"Protein identifications for a Saccharomyces cerevisiae protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "The complete sequence of Saccharomyces cerevisiae Yeast 11:587-591(1995).
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NCBI_TaxID=4932;
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Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
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Glyceraldehyde 3-phosphate dehydrogenase 3 (EC 1.2.1.12) (GAPDH TDH3 OR GPD3 OR YGR192C OR G7576.
                                                                                                                                                                                                      SWISS-2DPAGE; P00359; YEAST.
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from Saccharomyces cerevisiae.";
iol. Chem. 254:9839-9845(1979).
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MEDLINE-96437509; PubMed-8840185;

Sawada K., Agata K., Eguchi G.;

Characterization of terminally differentiated cell categorizing cDNA clones derived from chicken lens f Int. J. Dev. Biol. 40:531-535(1996).

-I- FUNCTION: INHIBITOR OF WNT SIGNALING PATHWAY (BY INSUE SPECIFICITY: EXPRESSED IN EYE LENS.
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Gallus gallus (Chicken).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
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16-CCT-2001 (Rel. 40, Last annotation update)
Dickkopf related protein-3 precursor (Dkk-3) (Dickkopf-3) (Lens fiber
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N -> D (IN REF. 1).
V -> I (IN REF. 1).
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                              This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                           SEQUENCE FROM N.A. STRAIN-Bristol N2;
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Andersson S.G.E., Zomorodipour A., Andersson J.O.,
Sicheritz-Ponten T., Alsmark U.C.M., Podowski R.M., Naeslund
Eriksson A.-S., Winkler H.H., Kurland C.G.;
"The genome sequence of Rickettsia prowazekii and the origin
                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa;
Rhabditidae; Pelode
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15-JUN-2002
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AC006627; AAK85459.1;
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. 39, Last sequence upo
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50.0%;
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15-JUL-1998 (Rel. 36, Last seq
15-JUN-2002 (Rel. 41, Last and
                                                                                                                                                                               This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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Goffeau A., Cadleu E., Dreano S., Gloux S., Lelaure V., Mottier S.,
Gallbert F., Aves S.J., Xiang Z., Hunt C., Moore K., Hurst S.M.,
Lucas M., Rochet M., Gaillardin C., Tallada V.A., Garzon A., Thode G.,
Daga R.R., Cruzado L., Jimenez J., Sanchez M., del Rey F., Benito J.,
Dominguez A., Revuelta J.L., Moreno S., Armstrong J., Forsburg S.L.,
Cerrutti L., Lowe T., McComble W.R., Paulsen I., Potashkin J.,
Shpakovski G.V., Ussery D., Barrell B.G., Nurse P.;
"The genome sequence of Schizosaccharomyces pombe.";
Nature 415:871-880(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Holroyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K., James K., Jones L., Jones M., Leather S., McDonald S., McLean J., Monony P., Moule S., Mungall K., Murphy L. D., Odell C., Oliver K., O'Neil S., Pearson D., Quail M.A., Rabbinowitsch E., Rutherford K., Rutter S., Saunders D., Seeger K., Sharp S., Skelton J., Simmonds M., Squares R., Squares S., Stevens K., Taylor R.G., Tivey A., Walsh S.V., Warren T., Whitehead S., Woodward J., Volckaert G., Aert R., Robben J., Grymonprez B., Weltjens I., Vanstreels E., Rieger M., Schaefer M., 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gabel C., Fuchs M., Fritzc C., Holzer E., Woestl D., Hilbert H.,
BORZym K., Langer I., Beck A., Lehrach H., Reinhardt R., Pohl T.M.,
Eger P., Zimmermann W., Wedler H., Wambutt D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hypothetical protein. SEQUENCE 712 AA; 80794 MW;
                                                                                                         EMBL; Z98763; CAB11490.1; HSSP; P29355; ISEM.
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Sgouros J., Peat N., Hayles J.,
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Schizosaccharomyces.
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InterPro; IPR002931; Trnsglumase_like.
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1- SIMILARITY: TO YEAST YDL117W.
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Baker S.,
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XXXTXQEXD 10	atch 77.4%; Score 24; DB 2; Length 209; cal Similarity. 50.0%; Pred. No. 46; S. Todola 0.	NON_TER 1 1 SEQUENCE 209 AA; 24131 MW; 52BF7911BB100152 CRC64;	PRINTS; PRO0279; BACTRLTOXIN. PROSITE; PS00278; STAPH_STREP_TOXIN_2; 1.	Pfam; PF01123; Stap_Strp_toxin; 1. Pfam; PF02876; Stap_Strp_tox_C; 1.		EMBL: AF086626; AAD52087.1;	J. Exp. Med. 189:89-102(1999).	racterization o	Proft T., Moffatt S.L., Berkahn C.J., Fraser J.D.;	MEDITINE GOOGADE. DIEMON GRASSE.	SEQUENCE FROM N.A.	[1]	Streptococcaceae; Streptococcus.	Bacteria; Firmicutes; Bacillus/Clostridium group; Lactobacillales;	Streptococcus pyogenes.	MICOGENIC EXOCOXIN 4 2 (FIRSHERL).	•	(TrEMBLrel. 13,	(TrEMBLrel.		O9ROO5 PRELIMINARY: PRT: 209 AA.
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Pfam; PF02876; Stap_Strp_tox_C; 1.
PFINTS; PR00279; BACTELTOXIN.
                                                                                                                                                                                    Mosaic Structure, and Significant Antigenic J. Exp. Med. 191:1765-1776(2000).
                                                                                                                                                                                                                                                                                                                                                                        Streptococcaceae;
NCBI_TaxID=1314;
                                                                                                                                                                                                                                                                                                                                                                                                                 Bacteria; Firmicutes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-OCT-2000 (TIEMBLIE1. 15, Created)
01-OCT-2000 (TIEMBLIE1. 15, Last sequence update)
01-MAR-2002 (TIEMBLIE1. 20, Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q9LAE0;
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HSSP; P13163; 1SXT.
InterPro; IPR001961; Stap/Strep_toxin.
Pfam; PF01123; Stap_Strp toxin.
                                                                                                       Pfam;
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                                                                                                                                                                                                                                                                                                                                                                                                                                  Streptococcus pyogenes
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                                          PROSITE;
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                                                                                                                                                                                                                                                    Fraser J.D.;
                                                                                                                                                                                                                                                                      Proft T., Moffatt
                                                                                                                                                                                                                                                                                       MEDLINE-20273982;
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                                                            PF01123; Stap_Strp_toxin; PF02876; Stap_Strp_tox_C; S; PR00279; BACTRLTOXIN.
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S.L., Weller K.D
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S.L., Weller K.D.,
                                                                                                                                                                                                                                                                                                                                                                                            Streptococcus.
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67EC279BBC4A8247 CRC64;
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Q9LAD8;
01-OCT-2000
Mosaic Structure, and Significant J. Exp. Med. 191:1765-1776(2000).
                                                                                                                                                                    Streptococcaceae; NCBI_TaxID=1314;
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01-OCT-2000 (TrEMBLrel.
01-MAR-2002 (TrEMBLrel.
Mitogenic exotoxin Z-7 (
                                                          Fraser J.D.;
                                                                          MEDLINE=20273982;
Proft T., Moffatt
                                                                                                               SEQUENCE FROM
STRAIN-11574;
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01-OCT-2000
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Pfam; PF02876; Stap_Strp_tox_C; 1.
PRINTS; PR00279; BACTRLTOXIN.
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HSSP; P13163; 1SXT.
InterPro; IPR001961; Stap/Strep_toxin.
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NCBI_TaxID=1314;
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01-MAR-2002
                                   "The Streptococcal Superantigen SMEZ Exhibits Wide Allelic Variation,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE=20273982; PubMed=10811869; Proft T., Moffatt S.L., Weller K.D
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                                                                          PubMed=10811869;
S.L., Weller K.D.,
                                                                                                                                                                                    Streptococcus.
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RESULT

OCCUPANT

ESULT 7
Q9LAD6
ID Q9LA
ID Q9LA
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DT 01-0
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Matches 5
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Best Local S
Matches
                                                                    Q9LAD6;
Q1-QCT-2000 (TrEMBLrel. 15, Created)
Q1-QCT-2000 (TrEMBLrel. 15, Last sequence update)
Q1-MAR-2002 (TrEMBLrel. 20, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR001961; Stap/Strep_toxin.
Pfam; PF01123; Stap_Strp_toxin; 1.
Pfam; PF02876; Stap_Strp_tox_C; 1.
PRINTS; PR00279; BACTRLTOXIN.
PROSITE; PS00278; STAPH_STREP_TOXIN_2;
NON_TER 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Streptococcus pyogenes.
Bacteria; Firmicutes; Bacillus/Clostridium
Streptococcaceae; Streptococcus.
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Pfam; Pf01123; Stap_Strp_toxin; 1.

Pfam; PF02876; Stap_Strp_tox_C; 1.

PRINTS; PR00279; BACTRLTOXIN.

PROSITE; PS00278; STAPH_STREP_TOXIN_2;

NO. TERPS PS00278; STAPH_STREP_TOXIN_2;
  Streptococcaceae; NCBI_TaxID=1314;
                                           Streptococcus pyogenes.
Bacteria; Firmicutes; Bacillus/Clostridium
                                                                                                                                                                                                                        Q9LAD6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "The Streptococcal Superantigen SMEZ Exhibits Wide Allelic Variation, Mosaic Structure, and Significant Antigenic Variation.";
J. Exp. Med. 191:1765-1776(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Proft T., Mc
Fraser J.D.;
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HSSP; P13163; 1
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Proft T., Moffatt S.L., Weller K.D.,
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01-MAR-2002 (TrEMBLrel.
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5; Conserv
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50.0%;
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Last annotation updat
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Pred. No. 46;
0; Mismatches
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                                             Lactobacillales;
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Pfam; PF02876; Stap_Strp_tox_C; 1.

PRINTS; PR00279; BACTRLTOXIN.

PROSITE; PS00278; STAPH_STREP_TOXIN_2;

NON_TER 1 1
                                                                                                                                                                                 "The Streptococcal Superantigen SMEZ Exhibits Wide Allelic Variation, Mosaic Structure, and Significant Antigenic Variation.";
J. Exp. Med. 191:1765-1776(2000).
                                                                                                                                                                                                                                                                                           Streptococcus pyogenes.
Bacteria; Firmicutes; B
Streptococcaceae; Strep
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01-OCT-2000 (TrEMBLrel.
01-JUN-2002 (TrEMBLrel.
Mitogenic exotoxin Z-10
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HSSP; P13163; ISXT.
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J. Exp. Med. 191:1765-1776(2000).
                                                                                                       Pfam; PF01123; Stap_Strp_toxin; 1.
pfam; PF02876; Stap_Strp_tox_C; 1.
PRINTS; PR00279; BACTRITOXII.
PROSITE; PS00278; STAPH_STREP_TOXII
                                                                                                                                                            EMBL; AF143660; AAF66660.1; HSSP; P13163; 1SXT.
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                                                                                    SEQUENCE
                                                                                                                                                InterPro; IPR001961; Stap/Strep_toxin
                                                                                                                                                                                                                    Fraser J.D.;
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KTTVTAQEID
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                                          Conservative
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                                                                                    24102 MW;
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50.08;
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15, Last sequence update)
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(Fragment)
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                                          Mismatches
                                                     NO.
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RESULT 9
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Q9LAD4 Q9LAD4;

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RESULT 10
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Matches 5
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Bacteria; Firmicutes; Bacillus/Clostridium
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01-OCT-2000 (TrEMBLrel.
01-JUN-2002 (TrEMBLrel.
Mitogenic exotoxin Z-12
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01-OCT-2000 (TrEMBLrel.
01-JUN-2002 (TrEMBLrel.
Mitogenic exotoxin Z-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Streptococcaceae; NCBI_TaxID=1314;
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Bacteria; Firmicutes; 1
                                                                                                                                                                         PRINTS;
                                                                                                                                                                                                                   Pfam;
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                                                                                                                                                                                                                                                                                                    Mosaic Structure, and Significant J. Exp. Med. 191:1765-1776(2000).
                                                                                                                                                                                                                                                                                                                                                                                        Proft T., Moffatt
                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN-10303
                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
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                                                                                                           SEQUENCE
                                                                                                                                                PROSITE; PS00278; STAPH_STREP_TOXIN_2;
                                                                                                                                                                                                                                   InterPro; IPR001961; Stap/Strep_toxin
                                                                                                                                                                                                                                                                                                                                            "The Streptococcal Superantigen SMEZ Exhibits Wide Allelic Variation
                                                                                                                                                                                                                                                                                                                                                                    Fraser J.D.;
                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE-20273982;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE-20273982; PubMed-10811869; Proft T., Moffatt S.L., Weller K.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRAIN-9779;
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PF02876; Stap_Strp_tox_C; 1.
PR00279; BACTRLTOXIN.
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S.L., Weller K.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Streptococcus.
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                                        Score 24; DB
Pred. No. 46;
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Pred. No.
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01-OCT-2000 (TrEMBLrel.
01-JUN-2002 (TrEMBLrel.
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NCBI_TaxID=1314;
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NCBI_TaxID=1314;
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01-OCT-2000 (TrEMBLrel. 1:
01-JUN-2002 (TrEMBLrel. 2
   EMBL; AF143664; AAF66664.1; -- HSSP; P13163; 1SXT.
InterPro; IPR001961; Stap/Strep_toxin.
Pfam; PF01123; Stap_Strp_toxin; 1.
Pfam; PF02876; Stap_Strp_tox_C; 1.
                                                                            "The Streptococcal Superantigen SMEZ Exhibit Mosaic Structure, and Significant Antigenic J. Exp. Med. 191:1765-1776(2000).
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Pfam; PF001123; Stap_Strp_toxin; 1.
Pfam; PF02876; Stap_Strp_tox_C; 1.
PRINTS; PR00279; BACTFLTOXIN.
PROSITE; PS00278; STAPH_STREP_TOXIN_2;
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                                                                                                                                                                                                                                   Streptococcus pyogenes.
Bacteria; Firmicutes; Bacillus/C
Streptococcaceae; Streptococcus.
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                                                                                                                                         MEDLINE=20273982; PubMed=10811869;
Proft T., Moffatt S.L., Weller K.D.,
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Proft T., Moffatt S.L., Weller K.D
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P13163; 1SXT.
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Stap_Strp_toxin;
Stap_Strp_tox_C;
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RESULT 13
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EMBL; AF143655; AAF66665.1; -...
HSSP; P13163; ISXT.
   MEDLINE=20273982;
Proft T., Moffatt
                                                               SEQUENCE FROM N.A. STRAIN-10649;
                                                                                                                                           Bacteria; Firmīcutes; Bacillus/Clostridium
Streptococcaceae; Streptococcus.
NCBI_TaxID=1314;
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Proft T., Moffatt S.L., Weller K.D
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             antirheumatic; antiproliferative; cytostatic; cardiant; vasotropic; cerebroprotective; nootropic; neuroprotective; antibacterial; virucide; fungicide; ophthalmological; gene therapy; autoimmune disease; infection; hyperproliferative disorder; cardiovascular disorder; anglogenesis; cerebrovascular disorder; nervous system disorder; ocular disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-OCT
22-OCT
Disclosure; Page 362; 374pp; English
                                     Nucleic acids encoding hameliorate, or diagnose disorders and cancer -
                                                                                                                                                                                                                                          26-MAR-1999;
22-DEC-1999;
                                                                                                                                                                                                                                                                                                                                            05-OCT-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              wound healing; s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gene 3 human secreted protein homologous amino acid sequence
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                                                                                                                                                             Rosen
                                                                                                                                                                                                                                                                                                     22-MAR-2000; 2000WO-US07526
                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; secreted protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-2001
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                                                                                                                                                                                                   (HUMA-) HUMAN GENOME
                                                                                                                      2000-611713/58
                                                                                                                                                         CA,
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990S-0171550.
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5-0161359.
5-0161360.
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3-0159637.
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160767
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                                                          human secreted proteins, used to prevent, e conditions such as autoimmune disorders,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              food
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              additive;
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                                                          treat,
skin
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ophthalmological. The polynucleotides and polypeptides can be are used to copital prevent, treat or ameliorate a medical condition in e.g. humans, mice, crabbits, goats, horses, cats, dogs, chickens or sheep. They are also used in diagnosing a pathological condition or susceptibility to a pathological condition or susceptibility to a pathological condition. Disorders which are diagnosed or treated include cautoimmune diseases, hyperproliferative disorders, cardiovascular conditions caused by bacteria, viruses and fungi and ocular conditions caused by bacteria, viruses and fungi and ocular conditions caused by bacteria, viruses and fungi and ocular conditions. The polypeptides can also be used to aid wound healing and comparate tial colling and colling and comparate tial colling and colli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           invention. Human secreted proteins have activities based on the tissues and cells the genes are expressed in Example of activities include: immunosuppressive; antiarthritic; antiheumatic; antiprolliferative; cytostatic; cardiant; vasotropic; cerebroprotective; nootropic; neuroprotective; antibacterial; virucide; fungicide; and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     human secreted proteins given in AAB38119 to AAB38105. AAB38201 represent human secreted polypeptide sequences and proteins AAB38201 represent human secreted polypeptide sequences and proteins homologous to them, which are given in the exemplification of the prohomologous to them, which are given in the exemplification of the tigs!
Sequence
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46
    AA;
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Query Match Best Local S Matches 4 30-JAN-2001 AAB38173; AAB38173 standard; Protein; 46 19 Similarity 40. 4; Conservative KKXXXXXXLD KKSAAESMLD (first entry) 10 28 69.2%; 40.0%; 0 Score 18; DB 21; Pred. No. 1.5e+02; 0; Mismatches 6; A Length 46; Indels 0; Gaps

0

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Human secreted protein sequence encoded by gene 3 SEQ Ħ NO:112

fungicide; ophthalmological; gene therapy; autolumnne disease; infection; hyperproliferative disorder; cardiovascular disorder; angiogenesis; cerebrovascular disorder; nervous system disorder; ocular disorder; wound healing; skin aging; food additive; preservative. cerebroprotective; nootropic; neuroprotective; antibacterial; virucide; fungicide; ophthalmological; gene therapy; autoimmune disease. infantion Human; secreted protein; diagnosis; immunosuppressive; antiarthritic; antirheumatic; antiproliferative; cytostatic; cardiant; vasotropic;

Homo sapiens

WO200058468-A2

05-OCT-2000.

22-MAR-2000; 2000WO-US07526

26-MAR-1999; 22-DEC-1999; 99US-0126600. 99US-0171550.

(HUMA-) HUMAN GENOME SCI INC

Rosen CA, Ruben SM, Komatsoulis 9

WPI; 2000-611713/58

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RESULT 4
AAG02207
В
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   disorders, infections caused by bacteria, viruses and fungi and ocular disorders. The polypeptides can also be used to aid wound healing and epithelial cell proliferation, to prevent skin aging due to sunburn, to maintain organs before transplantation, for supporting cell culture of primary tissues, to regenerate tissues and in chemotaxis. The polypeptides can also be used as a food additive or preservative to increase or decrease storage capabilities. AAC69390 to AAC69398 and AAB38118 represent sequences used in the exemplification of the polypeptides can also be used as a food additive or preservative to increase or decrease storage capabilities. AAC69390 to AAC69398 and AAB38118 represent sequences used in the exemplification of the properties.
                                                                                                                                                                                                                                                                                                                  gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ophthalmological. The polynucleotides and polypeptides can be are used to prevent, treat or amelicrate a medical condition in e.g. humans, mice, rabbits, goats, horses, cats, dogs, chickens or sheep. They are also used in diagnosing a pathological condition or susceptibility to a pathological condition. Disorders which are diagnosed or treated include autoimmune diseases, hyperproliferative disorders, cardiovascular disorders, cardiovascular disorders, cerebrovascular disorders, angiogenesis, nervous system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        and cells the genes are expressed in. Example of activities include: immunosuppressive; antiarthritic; antirheumatic; antiprolliferative; cytostatic; cardiant; vasotropic; cerebroprotective; nottropic; neuroprotective; antibacterial; virucide; fungicide; and
                                                                   Dumas Milne Edwards
                                                                                                                                                                                                                                               EP1033401-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAG02207 standard; Protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nucleic acids encoding human secreted proteins, used to prevent, treat, ameliorate, or diagnose conditions such as autoimmune disorders, skin
                                                                                                        (GEST ) GENSET
                                                                                                                                                                           21-FEB-2000;
                                                                                                                                                                                                              06-SEP-2000
                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                    Human secreted protein, SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                        06-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                           AAG02207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAB38201 represent human secreted polypeptide sequences and proteins homologous to them, which are given in the exemplification of the proteins invention. Human secreted proteins have activities based on the tiss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 362; 374pp;
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                                  2000-500381/45.
                                                                                                                                                                                                                                                                                                                 therapy;
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                                                                                                                                                                                                                                                                                                                                     5' EST;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               secreted proteins given in AAB38119 to AAB38165. AAB38166 to
                  AAC02213
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                                                                                                                                                                           2000EP-0200610
                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                  chromosome
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                                                                   Duclert A,
                                                                                                                                                                                                                                                                                                                  mapping.
                                                                                                                                                                                                                                                                                                                                 sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            147 AA.
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                 tag; secreted protein; cDNA isolation
                                                                                                                                                                                                                                                                                                                                                                      6288
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1.5e+02;
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RESULT 5
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           The present sequence represents rat ninjurin 1 (nerve injury induced). The ninjurin protein (NP) plays a role in axonal regeneration of peripheral nervous system (PNS) neuronal cells after injury. The products can be used for developing products for treating ninjurin mediated disorders including conditions involving inappropriate (i.e.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present sequence is a polypeptide encoded by one of a large number of 5' ESTs derived from mRNAs encoding secreted proteins. The 5' ESTs were prepared from total human RNAs or polyA+ RNAs derived from 30 different tissues. EST sequences usually correspond mainly to the 3' untranslated region (UTR) of the mRNA because they are often obtained from oligo-dr primed cDNA libraries. Such ESTs are not well suited for isolating cDNA sequences derived from the 5' ends of mRNAs and even in those cases where longer cDNA sequences have been obtained, the full 5' UTR is rarely included. 5' ESTs are derived from mRNAs with intact 5' ends and can therefore be used to obtain formals, gene therapy and chromosome mapping procedures. They are used to obtain upstream regulatory sequences and to design expression and secretion vectors.
                                                                                                                                                                                               Claim
                                                                                                                                                                                                                                                                                                                                                                 N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New nucleic acid that is a 5' expressed sequence tag (5' EST) for obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for diagnostic, forensic, gene therapy and chromosome mapping procedur
                                                                                                                                                                                                                                                      cellular
                                                                                                                                                                                                                                                                    New isolated nerve injury induced (ninjurin) gene - used to develop products for treating conditions involving excessive or insufficient
                                                                                                                                                                                                                                                                                                                                                                                                                                               Araki T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (UNIW ) UNIV WASHINGTON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-JUL-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-JUL-1997;
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DB; AAV20665.
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4; Conserv
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                                                                                                                                                                                            Fig 1B;
                                                                                                                                                                                                                                                   adhesion,
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Milbrandt
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            147
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96US-0672850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cellular adhesion molecule; membrane bound; iduced gene; inflammation; nervous system.
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                                                                                                                                                                                         80pp;
                                                                                                                                                                                                                                                e.g.
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                                                                                                                                                                                            English.
                                                                                                                                                                                                                                                   inflammation
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 18;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                   유
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.4e+02;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21;
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mediated disorders including excessive or insufficient) co

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RESULT 6
AAW48272
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
              The present sequence represents human ninjurin 1 (nerve injury induced). The ninjurin protein (NP) plays a role in axonal regeneration of peripheral nervous system (PNS) neuronal cells after injury. The products can be used for developing products for treating ninjurin mediated disorders including conditions involving inappropriate (i.e. excessive or insufficient) cellular abesion. Conditions involving excessive cellular adhesion which may be treated include e.g. inflammatory diseases such as rheumatoid arthritis, asthma, allergy conditions, adult respiratory distress syndrome, inflammatory bowel diseases (e.g. Crohn's disease, ulcerative colitis and regional enteritis) and ophthalmic inflammatory diseases, autoimmune diseases, thrombosis or inappropriate platelet aggregation conditions,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   arterlosclerosis, reocclusion following thrombolysis, cardiovascu diseases, some forms of diabetes and neoplastic disease including metastasis conditions. The products can also be used to promote cellular adhesion, e.g. in nerve regeneration, wound healing or prosthetic implantation. The products can also be used for detect
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       excessive cellular adhesion which may be treated include e.g. inflammatory diseases such as rheumatoid arthritis, asthma, allergy conditions, adult respiratory distress syndrome, inflammatory bowel diseases (e.g. Crohn's disease, ulcerative colitis and regional enteritis) and ophthalmic inflammatory diseases, autoimmune diseases, thrombosis or inappropriate platelet aggregation conditions, arteriosclerosis, reocclusion following thrombolysis, cardiovascular
arteriosclerosis,
                                                                                                                                                                                                                                                                                                                                Claim
                                                                                                                                                                                                                                                                                                                                                                     New isolated nerve injury induced (ninjurin) gene - used to develop products for treating conditions involving excessive or insufficient cellular adhesion, e.g. inflammation or tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Araki T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-JUL-1996;
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                                                                                                                                                                                                                                                                                                                            F1g
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                                                                                                                                                                                                                                                                                                                            2B; 80pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           induced
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       diagnosis and
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96US-0672850
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cellular adhesion molecule; membrane bound;
reocclusion
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       69.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene;
                                                                                                                                                                                                                                                                                                                            English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      inflammation; nervous system
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Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 19;
4.5e+02;
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cardiovascular
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RESULT 7
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          polynucleotides are also used in diagnostics as expressed sequence tags for identifying expressed genes. (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polynucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and agains activity. ABG00010-ABG30377 represent novel human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 diseases, some forms of diabetes and neoplastic disease including metastasis conditions. The products can also be used to promote cellular adhesion, e.g. in nerve regeneration, wound healing or prosthetic implantation. The products can also be used for detection, purification, diagnosis and screening assays.
                                                                                                                                                                                                                     The invention relates to isolated polynucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromo and gene mapping, and in recombinant production of (II). The
                                                                                                                                                                                                                                                                                                                                                New isolated polynucleotide and encoded polypeptides, useful diagnostics, forensics, gene mapping, identification of mutat responsible for genetic disorders or other traits and to asset the disorders or other traits.
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23-AUG-2000; 2000US-0649167
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (HYSE-) HYSEQ INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human;
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                                                                                                                                                                                                                                                                                                                                                                                                                                     2001-639362/73
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           chromosome mapping; gene mapping; gene therapy; upplement; medical imaging; diagnostic; genetic o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                      AAS84456
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amino acid sequences of the invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Liu C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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Pred. No. 4.5e
0; Mismatches
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                                                                                                                                                                                                                                                                                                     English
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No. 4.5e+02;
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o assess
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RESULT 8
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Best Local Similarity
Matches 4; Conserv
                             11-APR-1997;
11-APR-1997;
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23-MAY-1997;
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23-MAY-1997;
23-MAY-1997;
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07-MAR-1997;
07-MAR-1997;
07-MAR-1997;
07-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                               Human; secreted protein; testis; tumour; foetal fusion protein; cancer; central nervous system; diagnosis; neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                         11-SEP-1998
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11-APR-1997;
                                                                                                                                                                                              11-APR-1997
11-APR-1997
                                                                                                                                                                                                                                                                                                        06-MAR-1998;
                                                                                                                                                                                                                                                                                                                                           W09839448-A2
                                                                                                                                                                                                                                                                                                                                                                     Misc-difference
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-JAN-1999
                                                                                                                                                                                                                                                                                                                                                                                               sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   secreted protein encoded
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KKAASHRALD 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             173 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
  9708-0061060

9708-0040161

9708-0040161

9708-0040133

9708-0040333

9708-0040333

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9708-00403311

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9708-0043313

9708-0043313

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                                                                                                                                                                                                                                                                                                        98WO-US04493
                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
200
/label= unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 69.2%;
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Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                   gene 176 clone HFTBR48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 22; Lc. 5.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                        brain tissue; seizure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 173;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
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Bednarik DP, Brewer LA, Car
Feng P, Ferrie AM, Fischer
Kyaw H, Lafleur DW, Li Y,
                                                                                                                                                                                                                                                                                                     22-AUG-1
22-AUG-1
                                    (HUMA-) HUMAN
                                                                                                                                                                                                                                                                                                                                                                                     18-AUG-1997;
22-AUG-1997;
                                     GENOME
                                                     970S-0056884
970S-0056886
970S-0056887
970S-0056888
970S-0056892
970S-0056892
970S-0056892
970S-0056903
970S-0056903
970S-0056910
970S-0057650
970S-0057650
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97US-0056877.
97US-0056878.
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97US-0056880.
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97US-0056882.
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s-0056845.
s-0056862.
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                                     SCI INC
Carter KC, Duan her CL, Florence Y, Moore PA, Ni
 ŲĶŖ,
Ebner R, En
Greene JM,
Olsen HS, F
Endress GA;
JM, Hu JS;
, Rosen CA;
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RESULT 9
AAB47003
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Best Local :
                                                                                                                                                                                                                                Key
Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The gene can be used to generate fusion proteins by linking to the gene to a human immunoglobulin Fc portion (e.g. AAV59502) for increasing the stability of the fused protein as compared to the human protein only. The invention relates to 186 novel genes and their fragments (nucleic acid sequences: AAV59511-V59812; amino acid sequences AAW74731-W75026) which are useful for preventing, treating or ameliorating medical conditions e.g. by protein or gene therapy. Also, pathological conditions can be diagnosed by determining the amount of the new polypeptides in a sample or by determining the presence of mutations in the new polynucleotides. Specific uses are described for each of the 186 polynucleotides, based on which issues they are most highly expressed in
                                                                                                                                                                                                                                                                                                           Plant; D-like cyclin inhibitor gene; BRO4; hyperplastic; variant; growth rate; dividing cells; inactivation; protoplast; seed;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This sequence represents a secreted human protein encoded by the nucleic acid molecule designated Gene 176 from the human cDNA clone HFTBR48 (deposited as clone ATCC 97904 and ATCC 209050).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New isolated human genes and the secreted polypeptide(s) they encode - useful for diagnosis and treatment of e.g. cancers, neurological disorders, immune diseases, inflammation or blood disorders
              N-PSDB; AAC85203
                         WPI; 2001-024998/03
                                                                                                                                   15-MAY-2000; 2000WO-US13379
                                                                                                                                                                                                                                                                       Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                                                                       Plant D-like cyclin inhibitor BRO2.
                                                                                                                                                                                                                                                                                                                                                                                  22-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim
                                                    Roberts J,
                                                                                                          14-MAY-1999;
                                                                                                                                                              23-NOV-2000
                                                                                                                                                                                         WO200069883-A1.
                                                                                                                                                                                                                                                                                                   root cell;
                                                                                                                                                                                                                                                                                                                                                                                                              AAB47003;
                                                                                                                                                                                                                                                                                                                                                                                                                                     AAB47003 standard; Protein; 213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ruben
                                                                               (HUTC-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (see AAV59511 for described uses).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         151 KKAASHRALD 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Page 649-650;
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                                                                               HUTCHINSON CANCER RES CENT FRED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KKXXXXXXLD
                                                                                                                                                                                                                                                                                                   meristem; leaf.
                                                  Kelly B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 200 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                          99US-0134373
                                                                                                                                                                                                                               Location/Qualifiers 20..147
                                                                                                                                                                                                                    /label= BRO2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Soppet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            721pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 18;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Young PE,
                                                                                                                                                                                                                                                                                                                                                                                                                                      8
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5.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Yu GL,
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RESULT 10
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                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                  Matches
                                                                                                                                                                                                                                                          sequence is homologous to a sequence present in a D-like cyclin inhibitor gene and when integrated at the corresponding locus, functionally inactivates plant D-like cyclin inhibitor protein expression. The BRO4 coding sequence may be used to produce a hyperplastic variant plant, increase the growth rate of a plant, or increase the proportion of dividing cells in a plant cell population, relative to a wild-type plant, by functionally inactivating the expression of a plant D-like cyclin inhibitor gene in a plant. BRO4 is useful for increasing the proportion of dividing cells in a plant cell population comprising protoplast, seeds, root cells, meristem cells or leaf cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a yeast two hybrid screen. The BRO2 protein was found to contain seven amino acid sequence cyclin binding domain similar to that encoding this BRO1, BRO3 and BRO4 (See also AAB47005-6). The DNA encoding this
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Functionally inactivating expression of plant D-like cyclin inhibitor gene for producing a hyperplastic variant plant, modulating the growth and/or yield of plants, and increasing the proportion of dividing cells
                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 1; Page 38-39; 50pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Inhibitor, BRO2.
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                                                                                                             Н
                                                                                                                                                  4
                                                                                                                                                                    Similarity
                                                                         KKTKTYTSLD
                                                                                                             KKXXXXXXLD
                                                                                                                                                                                                                            213 AA;
                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                n in AAB47003 represents a plant D1 cyclin The DNA encoding this sequence was isolated using
                                                                         19
                                                                                                           10
                                                                                                                                                                    69.2%;
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                                                                                                                                                                  Score 18; DB 22;
Pred. No. 6.1e+02;
                                                                                                                                                  Mismatches
                                                                                                                                                6,
                                                                                                                                                                                      Length 213
                                                                                                                                                Indels
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e.g. venereal lymphogranuloma
                                                          PCTD plasmid from Chlamydia Trachomatis and immunogenic proteins for diagnosing and vaccinating against Chlamydia infections
                                                                                                                                                                                                                      Chlamydia trachomatis.
                                                                                                                                                                                                                                     CT; pCTD; epithelium; oc
monoclonal; polyclonal;
                                                                                                                                                                                                                                                                 PCTD ORF
                                                                                                                                                                                                                                                                                  05-FEB-1993
                                                                                                                                                                                                                                                                                                                    AAR29641 standard; Protein; 247
                                  Claim 1;
                                                                                     WPI; 1992-285922/35.
N-PSDB; AAQ27429.
                                                                                                               Comanducci M,
                                                                                                                                                 07-FEB-1991;
                                                                                                                                                                  17-APR-1991;
                                                                                                                                                                                                     EP499681-A.
                                                                                                                               (ISTS ) SCLAVO
                                                                                                                                                                                    26-AUG-1992.
                                 Page 8-16; 40pp; English
                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                SPA.
                                                                                                               Giuliani
                                                                                                                                                 91IT-0000314
                                                                                                                                                                  91EP-0106110
                                                                                                                                                                                                                                      ocula mucosa; uro-genital mucosa; antigen; l; antibody; vaccine.
                                                                                                                ž
                                                                                                              Ratti G,
                                                                                                                Tecce
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The sequences given in AAR29636-43 are encoded by from Chlamydia trachomatis (CT) serotype D, pCTD. generally infects epithelial tissues, such as the

the plasmid isolated This serotype

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RESULT 11
ABP41256
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Matches 4
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          The invention relates to 2175 novel human ovarian antigens (ABP41054-ABP43228) and to cDNAs encoding them (ABQ54131-ABQ56305), and also encompasses polypeptides 90% identical and polynucleotides 95% identical to the sequences of the invention. The invention additionally relates to recombinant vectors and host cells comprising human ovarian antigen polynucleotides, antibodies against human ovarian antigens, and the use of ovarian antigen polynucleotides and polypeptides in diagnosing, treating, prognosing or preventing various ovary and/or breast-related disorders. Such conditions include ovarian cancer and breast cancer, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; ovarian antigen; ovary; ovarian; breast; cancer; tumour; ovarian cancer; breast cancer; tumour; reproductive system disorder; infertility; pregnancy disorder; anovulation; polycystic ovary syndrof PCOS; ovarian cyst; dysmenorrhoea; endocrine disorder; infection; inflammatory condition; immune disorder; blood disorder; cardiovascular disorder; respiratory disorder; neurological disorder; gastrointestinal disorder; uninary system disorder; drug screening; gastrointestinal disorder; uninary system disorder; drug screening;
metastatic
                                                                                                                                                                                                                                                                                                                                                      Isolated nucleic acid molecules encoding novel ovarian polypeptides, useful in the prevention, treatment and diagnosis of cancer (e.g. ovarian cancer), immune disorders, cardiovascular disorders and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-JUN-2000; 2000US-209467P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                03-JAN-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene therapy; chromosome mapping;
antibody preparation; cytostatic;
antiinflammatory; gynaecological;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABP41256 standard;
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                                                                                                                                                                                                                                                                                 Claim 11; SEQ
                                                                                                                                                                                                                                                                                                                                 ovarian cancer), immu 
neurological diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Birse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-JUN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human ovarian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  antibodies to be used
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              2002-147878/19.
DB; ABQ54333.
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Similarity 40.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rosen CA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                 ID No 2388;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENOME
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                                                                                                                                                                                                                                                                                                                                      , immune
of ovarian
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                                                                                                                                                                                                                                                                               2922pp;
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Pred. No.
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breast
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               forensic analysis; immunomodulatory; neuroprotective, reproductive.
                                                                                                                                                                                                                                                                               English
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origin,
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RESULT 12
AAW93144
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CC sequence represents a human ovarian antigen of the invention.

CC specification, but was obtained in electronic format directly from WIPO
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Best Local S
Matches 4
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                                                                                                                                                                                                                                Beaulieu
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                                                                                                                                       wood
                                                                                                                                               New acidophilic and thermostable xylanase enzymes from Actinomadura sp. FC7 - useful for treating plant biomass, especially paper and
                                                                                                                                                                                                                                                           (UYSH ) UNIV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S. lividans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAW93144 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              disorders,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          polycystic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       disorders (e.g., infertility, disorders of pregnancy,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                   pulp,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             236 KKAASHRALD
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                                                                                                                                     to degrade
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ovary syndrome, ovarian cysts,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        xylanase A protein Stmxlna
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                                                                                                                                       hemicellulose
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                                                                                                                                     and hydrolyse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 23;
7.9e+02;
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                                                                                                                                     xylan
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This invention describes the use of novel acidophilic and thermostable xylanase enzymes (XYL I and XYL II) from Actinomadura sp. FC7 which retain their activity under harsh industrial conditions (e.g. high

Example 8;

Fig

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60pp;

English

temperature or wide pH ranges) and may be secreted by recombinant host cells, to treat plant biomass. Xylanases XYL I and XYL II are part o a large group of hemicellulase enzymes and function by cutting the

XYL II are part of

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This invention describes the use of novel acidophilic and thermostable xylanase enzymes (XYL I and XYL II) from Actinomadura sp. FC7 which retain their activity under harsh industrial conditions (e.g. high temperature or wide pH ranges) and may be secreted by recombinant host cells, to treat plant biomass. Xylanases XYL I and XYL II are part of a large group of hemicellulase enzymes and function by cutting the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       substrate with a high beta-glucan or cellulose content. XYL I and XYL II retain their activity at high temperatures (e.g. 70 deg. C) and at low pHs (e.g. 4.0), conditions which temperatures (e.g. 70 deg. C) and at low pHs (e.g. 4.0), conditions which temperature most known xylanases. Enzymes that remain active in these conditions may be used in industrial processes that are carried out at high temperature and low pH to speed up other, non-enzymatic reactions, minimising costs, energy requirements, and the risk of pollution, (e.g. enzymes XYL I and XYL II can be used to facilitate chlorine bleaching of paper pulp which is carried out in hot, acidic conditions). Pretreatment with XYL I and XYL II, allows the bleaching agents to penetrate better, to remove lighth from the pulp and 'bleach' the colouration from it. This means smaller quantities of the agents can be used to produce the same or a better result. Also, NOTE: This patent is an equivalent to FI9503640.
                                                                                                                                                         New acidophilic and thermostable xylanase enzymes from Actinomadura sp. FC7 - useful for treating plant biomass, especially paper and wood pulp, to degrade hemicallulose and hydrolyse xylan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Streptomyces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Xylanase A; acidophilic; thermostable; XYL I; XYL II; plant biomass; hemicellulase; beta-1,4 bond; xylosic chain; xylan; D-xylose; paper; pulp; chlorine bleaching; feed; beta-glucan; cellulose; lignin.
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they may be used
of the bleaching
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
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                                                                                                                          English
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Pred. No.
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1.1e+03;
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he efficiency
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RESULT 14
AAW93157
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XX AAW9:
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XX XY1:
XX Y1:
XX Y1:
XX PN US:
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CC XYL I and XYL II may also be used to treat feed, by degrading a constituent of the material in the paper activity at high temperatures (e.g., 70 deg, C) and at low phs (e.g. 4.0), conditions which tend to denature most known xylanases.

CC Enzymes that remain active in these conditions may be used in industrial processes that are carried out at high temperature and low ph to speed up other, non-enzymatic reactions, minimising costs, energy requirements, and the risk of pollution, (e.g. enzymes XYL I and XYL II can be used to caidic conditions). Pretreatment with XYL I and XYL II, allows the collocating agents to penetrate better, to remove lignin from the pulp and bleaching degrats can be used to produce the same or a better result. Also, collocation is an equivalent to Fi9503640.
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Best Local S
Matches 4
                                                                                                                                                                                                                                         New acidophilic and thermostable xylanase enzymes from Actinomadura sp. FC7 - useful for treating plant biomass, especially paper and wood pulp, to degrade hemicellulose and hydrolyse xylan
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hemicellulase;
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4; Conserv
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Pred. No.
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xylanase enzymes (XYL I and XYL II) from Actinomadura sp. FC7 which retain their activity under harsh industrial conditions (e.g. high temperature or wide pH ranges) and may be secreted by recombinant host cells, to treat plant biomass. Xylanases XYL I and XYL II are part or

describes the use of novel acidophilic and thermostable

ells, to treat plant biomass. Xylanases XYL I and large group of hemicellulase enzymes and function

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This invention

Example

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Fig. 13;

60pp;

English.

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RESULT 15
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ID ABG19
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CC XYL I and XYL II may also be used to treat feed, by degrading a CC substrate with a high beta-glucan or cellulose content. XYL I and XYL II contains a conditions which tend to denature most known xylanases.

CE processes that remain active in these conditions may be used in industrial processes that remain active in these conditions may be used in industrial processes that are carried out at high temperature and low pH to speed up context, non-enzymatic reactions, minimising costs, energy requirements, cand the risk of pollution, (e.g. enzymes XYL I and XYL II can be used to conditions). Pretreatment with XYL I and XYL II can be used to bleaching agents to penetrate better, to remove lignin from the pulp and bleaching agents to penetrate better, to remove lignin from the pulp and conditions can be used to produce the same or a better result. Also, conditions can be used to produce the same or a better result. Also, conditions and equivalent to FI9503640.
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The invention relates to isolated polynucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The
                                                                                                                                                                                                                 New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess biodiversity
                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-639362/73.
N-PSDB; AAS83257.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-MAR-2001; 2001WO-US08631.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; chromosome mapping; gene mapping; gene therapy; forensic; food supplement; medical imaging; diagnostic; genetic disorder.
                                                                                                                                                          Claim
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAR-2000;
23-AUG-2000;
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2000US-0649167.
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ches 6;
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Search completed: June Job time : 34.9394 secs

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                                                                                                                                                                                                 polynucleotides are also used in diagnostics as expressed sequence tags for identifying expressed genes. (I) is useful in gene therapy techniques (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polynucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic amino acid sequences of the invention.

Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO at fire, wipo.int/pub/published_pct_sequences.
                                                                                Query Match
Best Local Similarity
Matches 4; Conserv
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372 KKVTLSTSLD
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Title: Perfect so Sequence:

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Scoring table:

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Post-processing:

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Maximum Match 100%
Listing first 45 summaries

Database

Issued_Patents_AA:*
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2: /cgn2_6/ptodata/1,
3: /cgn2_6/ptodata/1,
4: /cgn2_6/ptodata/1,
5: /cgn2_6/ptodata/1,
6: /cgn2_6/ptodata/1,

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Total number of hits satisfying chosen parameters:
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/cgn2_6/ptodata/1/1aa/5B_COMB.pep:*
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33.481 Million cell updates/sec
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  US-08-672-850-13
US-08-672-850-6
US-08-672-850-6
US-08-672-850-12
US-09-149-476-495
US-08-933-750C-32
US-09-234-613-32
US-08-9468-544-18
US-08-468-544-18
US-08-282-197C-63
US-08-282-197C-63
US-08-282-197C-63
US-08-68-282-197C-63
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US-08-68-197C-63-19
US-08-68-197C-63-19
US-08-68-197C-10245-19
US-08-68-240A-19
PCT-US95-10245-19
US-08-896-933-6
US-08-898-933-7
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US-08-672-850-13
                                                                                                                     Query Match
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Matches 4
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                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIJIM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTTWARE: PATENTIN Release #1.0, Ve
CURRENT APPLICATION DATA:
APPLICATION UNMER: US/08/672,850
FILING DATE: 24-JUL-1996
CILASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: S11va, RODIA M.
REGISTRATION NUMBER: 38,304
REGISTRATION NUMBER: 38,304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Milbrandt, Jelley APPLICANT: Araki, Toshiyuki TITLE OF INVENTION: NINJURIN NUMBER OF SEQUENCES: 34
CORRESPONDENCE ADDRESS:
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                 TELEFAX: (415) 398-324
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 100 amino acid
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                                                                                                                                                                                                                                       TYPE: amino a STRANDEDNESS: TOPOLOGY: unk
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CITY: San Francisco
STATE: California
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4; Conservative
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ID NO: 13:
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US-08-446-918A-6

US-08-580-806-6

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US-08-440-291-111

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US-08-475-668A-111

US-08-485-551A-111

US-08-471-913A-111

US-08-471-913A-111

US-08-48-264A-111

US-08-474-349A-111

US-09-144-776B-12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent No. 61401:
                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Milbrandt, Jeffrey
APPLICANT: Araki, Toshiyuki
TITLE OF INVENTION: NINJURIN
NUMBER OF SEQUENCES: 34
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (415) 398-32 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                      tent No. 6140117
                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
               CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: A-
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
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APPLICANT: Araki, Toshiyuki
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OPERATING SYSTEM: PC-DOS/MS-DOS
                               SOFTWARE:
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                               PatentIn Release #1.0, Version #1.30
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US/08/672,850
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Pred. No. 1.4e+02;
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Suite 3400
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                                                                                                                                                                    TELEFAX: (415) 398-32 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 152 amino acids
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NAME: Silva, Robin M.
REGISTRATION UNMBER: 38,304
REFERENCE/DOCKET NUMBER: A-
                                                                                                                                                                                                                                                                                                                                                                                           MEDIUM TYPE: Floppy
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ADDRESSEE: Flehr, Hohbach, Test, Albritton
STREET: Four Embarcadero Center, Suite 3400
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REGISTRATION NUMBER: 38,304
REFERENCE/DOCKET NUMBER: A-
SLECOMMUNICATION INFORMATION:
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Araki, Toshiyuki
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              Score 18;
Pred. No.
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Pred. No.
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APPLICATION NUMBER: 60/038,621
                                                                                        FILING DATE: 1997-05-23
APPLICATION NUMBER: 60/
FILING DATE: 1997-05-23
                                                                                                                        FILING DATE: 1997-0 APPLICATION NUMBER:
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APPLICATION NUMBER: 60/047,587
FILING DATE: 1997-05-23
APPLICATION NUMBER: 60/047,492
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APPLICATION NUMBER:
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FILING DATE: 1997-03-07
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NUMBER: 60/047,632: 1997-05-23
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R APPLICATION NUMBER: 60/056,631

R FILING DATE: 1997-08-22

R APPLICATION NUMBER: 60/056,845

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RESULT 6
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                                                                                                                          Similarity
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ILING DATE: 1997-05-23
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LING DATE: 1997-09-05
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                                                             KKAASHRALD 160
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                                                                                                                         Score 18;
Pred. No.
                                                                                                             Mismatches
                                                                                                       DB 4; L. 1.7e+02; 6;
                                                                                                                                   Length 200;
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US-09-234-613-32
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                                                                                                                                                                                   RESULT 7
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                                                                                                                        Patent No. 6132973
GENERAL INFORMATION:
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Best Local Similarity
Matches 4; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                       INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 237 amino acids
                                                      APPLICANT:
                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-855-0555
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NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,
                             APPLICANT
                                          APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                   IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 536
PRIOR APPLICATION DATA:
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APPLICANT: Corley, Neil C.

TITLE OF INVENTION: HUMAN REGULATORY MOLECULES
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CLONE: 1602473
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CITY: Palo Alto
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM CONTROL OPERATING SYSTEM:
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T: Corley,
INVENTION:
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                                                                                                                                                      Application US/09234613
                                                                Lal, Preeti
Hillman, Jennifer L.
Bandman, Olga
Shah, Purvi
           Au-Young, Janice
Yue, Henry
Guegler, Karl J.
Corley, Neil C.
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Bandman, Olga
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N: 536
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HUMAN REGULATORY MOLECULES
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Pred. No. 2e+02;
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CORRESPONDENCE ADDRESS NUMBER OF SEQUENCES:

ADDRESSEE:

Incyte Pharmaceuticals, 3174 Porter Drive

Palo Alto

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IMMEDIATE SOURCE:
LIBRARY: BLADNO
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MEDIUM TYPE: Diskett
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APPLICATION NUMBER:
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SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                               NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                              TITLE OF INVENTION: PCTD PLASMID ISOLATED FROM CHLAMYDIA
TITLE OF INVENTION: TRACHOMATIC SEROTYPE D, ITS GENES AND PROTEINS ENCODED BY
TITLE OF INVENTION: THEM, RECOMBINANT PLASMIDS FOR THE EXPRESSION OF SAID
TITLE OF INVENTION: GENES IN HETEROLOGOUS SYSTEMS, PREPARATION OF SAID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE/DOCKET NUMBER: PF
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-855-0555
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REGISTRATION NUMBER: 3
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                                                                             COUNTRY:
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COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                               ADDRESSEE:
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Similarity 40.0%;
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September 23, 1997
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PC-DOS/MS-DOS
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Pred. No.
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Best Local Similarity
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                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
                                                                       CLASSIFICATION: 435
PRIOR APPLICATION DATA:
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                          FILING DATE: APPLICATION NUMBER:
                                                                                                        FILING DATE:
                                                                                                                      APPLICATION NUMBER:
                                                                                                                                                                                                                             COUNTRY: USA
ZIP: 22046-0747
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APPLICATION NUMBER:
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                                                         APPLICATION NUMBER:
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40.0%;
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                                                                                                                                                                                                                                                                                                                                                                                                                Marzia M.
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US/07/661,820
                            US/07/991,512
                                                          us/08/180,528
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Pred. No.
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Best Local (
                    INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/661,820
FILING DATE: 28-FEB-1991
     SEQUENCE
                                                               TELEPHONE: 703-241-1300
                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                            FILING DATE: 07-FEB-1991
ATTORNEY/AGENT INFORMATION:
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                          TELEFAX: /U
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-241-1300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: PCTD PLASMID ISOLATED FROM CHLAMYDIA FITTLE OF INVENTION: TRACHOMATIS SEROTYPE D, ITS GENES ANITITLE OF INVENTION: THEM; RECOMBINANT PLASMIDS FOR THE EDITLE OF INVENTION: GENES IN HETEROLOGOUS SYSTEMS, PREPAR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TUMBER OF SEQUENCES:
                                                                                                                                                                                                                                              APPLICATION NUMBER: US/08/468,544 FILING DATE: 06-JUN-1995 CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0
                                                                                               REGISTRATION NUMBER: 30,330
REFERENCE/DOCKET NUMBER: 1267-202P
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                                                                                                                                                                                                                                                                                                                                                                                                                       RESSEE: BIRCH, STEWART,
SET: 301 N. Washington
Falls Church
S: Virginia
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                                                                                                                              Leonard R.
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                                                                                                                                                                               IT MI 91A000314
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30,330
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Pred. No.
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US-08-282-197C-63
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TOPOLOGY:
US-08-282-197C-52
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US-08-282-197C-52
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Matches
                       Patent No.
                                    Sequence 63,
                                                                                                                                                                     Query Match
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Best Local Similarity
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APPLICANT:
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NAME: Cimbala, Michele A
REGISTRATION NUMBER: 33,
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                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
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MEDIUM TYPE: Floppy disk
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STATE: DC
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                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE:
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             INFORMATION:
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amino acid
                                    Application US/08282197C
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1100 New York Ave.,
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Brzezinski, Ryszard
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                                                                                                                                                                                                                                                                                                                                                                                                             IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                              202-371-2600
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N: 435
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                                                                                                                                                                                                                                                                                                               33,851
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Pred. No.
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Pred. No.
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Dery, Claude V Beaulieu, Carole

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Best Local Similarity
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                                                                       CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/0
FILING DATE: 29-JUL-1994
                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RECISTRATION NUMBER: 33,851
REFERENCE/DOCKET NUMBER: 10
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-371-2600
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MEDIUM TYPE: Floppy disk
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ADDRESSEE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
STREET: 1100 New York Ave., NW
                        CLASSIFICATION: 435
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Cimbala, Michele A
                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                           FITLE OF INVENTION: Thermostable X:
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                                                                                                                                      COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                        SOFTWARE: Patentin Release #1.0, Version #1.25
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                REGISTRATION NUMBER:
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REFERENCE/DOCKET NUMBER:
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/08282197C
                                                                                                                                                                                                                                                             E: Sterne, Kessler, Goldstein & Fox P.L.L.C. 1100 New York Ave., NW
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                                                                                                                                                                                                                                                                                                                                                                                            Brzezinski, Ryszard
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                                                                                                                                                                                                                                                                                                                                        Thermostable Xylanase DNA, Protein and
                                                                                                                                                                                                                                                                                                                                                              Carole
                                                                                          US/08/282,197C
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Pred. No.
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                                                                                TELEFAX: 202-371-2540
NFORMATION FOR SEQ ID NO:
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NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tent No.
MOLECULE TYPE:
                                                                     SEQUENCE CHARACTERISTICS
                                                                                                                             TELECOMMUNICATION INFORMATION:
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CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
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                                                                                                                                                                                                                                                                              APPLICATION NUMBER: FILING DATE: 31-OCT
                                                                                                                                                         NAME: Bugaisky, Larry B. REGISTRATION NUMBER: 35,086
                                                                                                                                                                                                                   APPLICATION NUMBER: US 08/282,001 FILING DATE: 29-JUL-1994
                                                                                                                                                                                                                                                                                                                                                                                                OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COUNTRY:
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                     STRANDEDNESS:
                                                                                                                                            REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                       CLASSIFICATION:
                                                                                                                                                                                                                                                                   CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/08/468,812 FILING DATE: 06-JUN-1995
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                                                      ENGTH:
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amino acid
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1100 New York Ave.,
                                                      491 amino acids
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Suominen, Pirkko
Lahtinen, Tarja
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Vehmaanper , Jari
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31-OCT-1994
                        not relevant
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US-08-590-563-8
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Best Local Similarity 40.0%;
Matches 4; Conservative
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                                                                                                                                                         TELEFAX: 202-371-2540
NFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     equence 8, Application US/08590563 stent No. 6300114
                                                                                                                   SEQUENCE CHARACTERISTICS:
LENGTH: 491 amino acids
                                 MOLECULE TYPE: peptide POSITION IN GENOME:
                                                                                                                                                                                             TELEPHONE: 202-371-2600
                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 08/332,412
FILING DATE: 31-CCT-1994
CLASSIFICATION: 536
PRIOR APPLICATION DATA: APPLICATION NUMBER: US 08/282,001
FILING DATE: 29-UUL-1994
CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION: 536
PRIOR APPLICATION UNDER: US 08/468,812
FILING DATE: 06-JUN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         POSITION IN GENOME:
CHROMOSOME/SEGMENT: M64551
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APPLICANT: Paloheimo, Marja
APPLICANT: Suominen, Pirko
APPLICANT: Suominen, Tarja
TITLE OF INVENTION: Production and Secretion of Proteins
NUMBER OF SEQUENCES: 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                              REGISTRATION NUMBER: 35,086
REFERENCE/DOCKET NUMBER: 1050.0340003
                                                                      TOPOLOGY:
                                                                                   STRANDEDNESS:
                                                                                                                                                                                                                                               NAME: Bugaisky, Lawrence B. REGISTRATION NUMBER: 35,086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/08 FILING DATE: 26-JAN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CITY: Washington STATE: D.C.
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ZIP: 20005
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                                                                                                    amino acid
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Vehmaanper , Jari
Fagerstr m, Richard
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                                                                    linear
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DN: 536
                                                                                   not relevant
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Search completed: June 5, 2003, 15:32:43
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Gapop 10.0 , Gapext
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                   US-09-465-714-2

US-09-465-714-3

US-08-882-431-12

US-09-870-759-18

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US-09-465-714-1

US-08-882-431-14

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US-09-738-626-6821
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0 US-09-840-787-32
US-10-125-692-16
0 US-09-770-621-8
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US-10-001-879-145
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Sequence 495, App
Sequence 32, Appl
Sequence 16, Appli
Sequence 18, Appli
Sequence 145, Appli
Sequence 145, Appli
Sequence 76, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 12, Appli
Sequence 11, Appli
Sequence 12, Appli
Sequence 12, Appli
Sequence 14, Appli
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151 KKAASHRALD 1 KKXXXXXXLD

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Query Match
Best Local Similarity 40.0
Matches 4; Conservative

69.28;

Score 18; Pred. No. Mismatches

2e+02; BB 9;

Length 200; Indels

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Gaps

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RESULT 2 US-09-840-787-32

Sequence 32, Application US/09840787 Patent No. US20020058264A1 GENERAL INFORMATION:

APPLICANT:

: Lal, Preeti Hillman, Jennifer L. Bandman, Olga Shah, Purvi Au-Young, Janice

RESULT US-09-8 Pablua Pablua GENER APPL FILE FILE CURR PT10 NOUMB SOOT SEQ I SEQ I SEQ I LERN ORG		
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9-391-495 acted 495, Application No. US20030 LINFORMATION: US20030 LINFORMATION: CANT: Ruben et al REFERENCE: PZ002P MT PILING DATE: MT FILING DATE: MT PILING DATE: MT PILING DATE: MT PILING DATE: MT PSQ ID NOS: MARE: PATENTIN VEI NO 495 TH: 200 STH: 200 STH: 200 STH: 200 STH: SIPE URE: SIPE		117 117 116 116 116 116 116 116 116 116
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91-495 91-495 91-495 on No. US2003004961 WFORMATION: TI: Ruben et al. INVENTION: 186 Hum ERENCE: PZ002P2 APPLICATION UMMBER: FILING DATE: 2001- PICCATION ON THE FEBOLIS: 761 PASCONTON ON THE FEBOLIS: 761 PASCONTON ON THE PASCON		<i>ន់ន សំ.សំ សំ ស</i>
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809 Sec 709	2	US-10-046-938-29 US-09-738-626-5990 US-09-150-947B-3 US-09-150-947B-9 US-10-113-809-1 US-10-113-809-1 US-10-113-809-1 US-09-150-947B-6 US-09-150-947B-6 US-09-150-947B-10 US-0
391 reted p /809,39 consult	LIGN	3-10-046- 3-10-046- 3-09-130- 3-10-113- 3-10-113- 3-10-113- 3-10-113- 3-10-113- 3-10-150- 3-10-150- 3-10-044- 3-10-053- 3-10-053- 3-10-053-
	ALIGNMENTS	046-938-29 -150-947B-3 -150-947B-3 -150-947B-3 -150-947B-5 -150-947B-5 -150-947B-1 -150-94
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TITLE OF INVENTION: HUMAN REGULATORY MOLECULES

Guegler, Karl Corley, Neil Yue, Henry

Karl

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SOFTWARE: FastSEQ
SEQ ID NO 16
                                                                                                                                                                                                                                                                                                 Publication No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                   CURRENT APPLICATION NUMBER: US/10/125,692
CURRENT FILING DATE: 2002-04-17
PRIOR APPLICATION NUMBER: US 60/285,477
PRIOR FILING DATE: 2001-04-20
                                                                                                                            TITLE OF INVENTION: Toll-Like Receptor 5 Ligands and Methods TITLE OF INVENTION: of Use FILE REFERENCE: P-IS 5155
                                  NUMBER OF SEQ
                                                                                                                                                                                                                                             APPLICANT:
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INFORMATION FOR SEQ ID NO: 32:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELECOMMUNICATION INFORMATION: TELEPHONE: 415-855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: 94304
COMPUTER READABLE FORM:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 KKXXXXXXLD 10
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Similarity 40.0%;
4; Conservative
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CLONE: 1602473
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OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US/09/840,787
FILING DATE: 23-Apr-2001
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0356 US
                                                                                                                                                                                Ozinsky, Adrian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 237 amino acids
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                                                                                                                                                                                                                                          Hayashi,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADDRESSEE:
                                                                                                                                                                                                     Underhill,
                                                                                                                                                                                                                      Smith, Kelly D.
                                                                                                                                                                                                                                                                                                                  Application US/10125692
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                   for Windows Version 4.0
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3174 Porter Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     lo Alto
                                                                                                                                                                                                                                          Fumitaka
                                                                                                                                                                                                     David M.
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Pred. No. 2.3e+02
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es 6;
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; ORGANISM: P. mirabilis1
US-10-125-692-16
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Best Local Similarity
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                                                                                                             TELEFAX: 202-371-2540 INFORMATION FOR SEQ ID NO:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tent No.
                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/282,001
FILING DATE: 29-JUL-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: Floppy
              MOLECULE TYPE: pep
POSITION IN GENOME:
                                                                                             SEQUENCE CHARACTERISTICS:
                                                                                                                                                     TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                             FILING DATE: 3
CLASSIFICATION:
                                                                                                                                                            REFERENCE/DOCKET NUMBER: 10
                                                                                                                                                                                NAME: Bugaisky, Lawrence B. REGISTRATION NUMBER: 35,086
                                           TOPOLOGY:
                                                                                                                                        TELEPHONE:
                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 0:
FILING DATE: 31-OCT-1994
                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: Washington
CHROMOSOME/SEGMENT:
                                                      STRANDEDNESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
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                                                                                 ENGTH:
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                                                                   amino acids
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VENTION: Production a
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Suominen, Pirkko
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Fagerstr m, Richard
                                      SS: No. US20010024815A1 Relevant
linear
                            peptide
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  M64551
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3.4e+02;
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US-10-113-809-3
                                                                                               ; ORGANISM: Homo sapien
US-10-001-879-145
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; OTHER INFORMATION: Bacterial Toxin Binding Ligand US-10-113-809-3
                                                                                                                                                         NUMBER OF SEQ ID NOS: "SOFTWARE: PatentIn ver SEQ ID NO 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best
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Best Local Similarity
Matches 4; Conserv
                                          Matches
                                                                    Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 145,
                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                               FILE REFERENCE: DEX-0281
CURRENT APPLICATION NUMBER: US/10/001,879
CURRENT FILING DATE: 2001-11-20
                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                             atent No.
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SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/10/113,809
CURRENT FILING DATE: 2002-03-29
PRIOR APPLICATION NUMBER: 101 16 042,9-41
PRIOR FILING DATE: 2001-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Maschke, Hans, E. TITLE OF INVENTION: EXOTOXIN-LIGAND
                                                                                                                             LENGTH: 58
                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/252,188 PRIOR FILING DATE: 2000-11-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILE REFERENCE: MBP-011XX
                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Salceda, Susana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                         ITLE OF INVENTION: Compositions and Methods Relating to Prostate Specific Genes
                                                                                                                                                                                                                                                                                                                                                                   PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ENGTH: 12
                                                        Y Match 65.4%;
Local Similarity 40.0%;
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Local Similarity 40.0%;
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KKXXXXXXID 10
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Cafferkey, Robe
Ali, Shujath
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                                                                                                                                                                                                                                                                                                         Sun,
                                                                                                                                                                                                                                                                                                                                                                 Macina, Roberto
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                                          Conservative
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                                                                                                                                                                        version 3.1
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                                                                                                                                                                                                                                                                                                                                    Robert
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Pred. No.
                                                      Score 17; DB 12;
Pred. No. 1.4e+02;
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                                        Mismatches
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4.5e+02;
                                                                    DB 12; Length 58;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-465-714-4
                                                                                                                          SOFTWARE: POSEQ ID NO 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
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                                                                                                 TYPE: PRT
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                                                                                                              CENGTH:
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; OTHER INFORMATION: Truncated bacterial sequence US-09-465-714-4
                                                                                                     ; ORGANISM: Homo sapiens
US-09-729-674-76
Query Match
Best Local Similarity 40.0
Thickes 4; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 17
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 4, Application US/09465714 Publication No. US20030032582A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                     FILE REFERENCE: 6055-64X
CURRENT APPLICATION NUMBER: US/09/729,674
CURRENT FILING DATE: 2000-12-04
                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 09/539,330 PRIOR FILING DATE: 2000-03-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 09/001,593 PRIOR FILING DATE: 1998-12-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/465,714
CURRENT FILING DATE: 1999-12-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Wahlsten, Jennifer L.
APPLICANT: Ramakrishnan, S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 107
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Ramakrishnan, S.
APPLICANT: Schlievert, Patrick M.
FITLE OF INVENTION: SPONTANEOUS MEMBRANE INSERTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Jacobs,
                                                                                                                                                                                                                                                                                                                     PPLICANT: Fechtel, Kim

PPLICANT: Genetics Institute, Inc.

ITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES ENCODING THEM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INFORMATION:
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                                                                                                                                                                                                               SEQ ID NOS: 283
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$20010039335A1
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Spaulding, Vikki
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Treacy, Maurice
Agostino, Michael J.
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                                                                                                                                                                                                                                                                                                                                                                                                    Wong, Gordon G.
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LaVallie, Edward R.
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                                            40.08;
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                          Score 17; DB 10;
Pred. No. 3.1e+02;
0; Mismatches 6;
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KKXXXXXXLD 10

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RESULT 11
US-08-882-431-12
; Sequence 12, Application US/08882431
; Publication No. US20030009015A1
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; TYPE: PRT
; ORGANISM: Bacterial Sequence
US-09-465-714-3
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US-09-465-714-3
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                                                                                                                                                                                                Matches
                                                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                                                                                Query Match
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SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 3
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Best Local
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Publication No. US20030032582A1
                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/465,714
CURRENT FILING DATE: 1999-12-17
PRIOR APPLICATION NUMBER: 09/001,593
PRIOR FILING DATE: 1998-12-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Ramakrishnan, S.
APPLICANT: Schilevert, Patrick M.
TITLE OF INVENTION: SPONTANEOUS MEMBRANE INSERTION
FILE REFERENCE: 09531/003001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Wahlsten, Jennifer L.
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CURRENT FILING DATE: 1999-12-17
PRIOR APPLICATION NUMBER: 09/001,593
PRIOR FILING DATE: 1998-12-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Schlievert, Patrick M.
TITLE OF INVENTION: SPONTANEOUS MEMBRANE INSERTION
FILE REFERENCE: 09531/003001
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                                                                                                                       121 KKQLAISTLD 130
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40.08;
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Pred. No. 4.1e+02;
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Pred. No.
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; ORGANISM: Staphylococcus aureus US-09-870-759-18
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                                                                                     SEQ ID NO 18
LENGTH: 234
TYPE: PRT
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Best Local Similarity
Matches 4; Conserv
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                         Sequence 18, Application US/09870759 Patent No. US20020177551A1 GENERAL INFORMATION:
                                                                                                                                                                                                      APPLICANT: TERMAN, David S
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TREATMENT OF NEOPLASTIC DISEASE
FILE REFERENCE: 870759
CURRENT APPLICATION NUMBER: US/09/870,759
CURRENT FILING DATE: 2002-01-14
                                                                                                                                                                  CURRENT FILING DATE: 2002-01-14
PRIOR APPLICATION NUMBER: US 60/208,128
PRIOR FILING DATE: 2000-05-30
                                                                                                                                      SOFTWARE: PatentIn version 3.1
                                                                                                                                                        NUMBER OF SEQ ID NOS: 166
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INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER:
TELECOMMUNICATION INFORMATION:
TELEPHONE: (301) 619-2065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Flopy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh
SOFTWARE: Microsoft Word 6.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET: US AIMY MENCE -5
CITY: FORT DETRICK
STATE: MARYLAND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION: NAME: Moran, John
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: Bactering TITLE OF INVENTION: Vaccines
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Robert G. Ulrich,
APPLICANT: Mark A. Olson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: Un
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: Amino Acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
ZIP: 21702-5012
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                                                                                                                                                                                                                                                                                                                                                                                                              160 KKQLAISTLD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown
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40.0%;
65.4%;
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Score 17; DB 9;
Pred. No. 4.9e+02;
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Pred. No. 4.9e+02
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 233;
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Length 234;

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                                                                                                                        ; OTHER INFORMATION: Hybrid containing bacterial and US-09-465-714-1 \,
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US-10-002-784A-12
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                                                                          Query Match
Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1, Application US/09465714 Publication No. US20030032582A1
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                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 17
SOFTWARE: FastSEQ for Windows Version 3.0
EQ ID NO 1
                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/465,714
CURRENT FILING DATE: 1999-12-17
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CURRENT FILING DATE: 2001-11-26
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: Apple Macintosh Microsoft Word 6.0 EQ_ID_NO_12
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NUMBER OF SEQ ID NOS:
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                                                                                                                                                      LENGTH: 238
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Wahlsten, Jennifer L.
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TYPE: PRT
ORGANISM: Artificial sequence
                                                                                                                                                                                                                                                                                                                        PPLICANT: Schlievert, Patrick M.
ITLE OF INVENTION: SPONTANEOUS MEMBRANE INSERTION
ILE REFERENCE: 09531/003001
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les 4; Conserv
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121 KKQLAISTLD 130
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                                                                          Similarity
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                             KKXXXXXXLD 10
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                                                                                                                                                                                                                                                              NUMBER: 09/001,593
1998-12-31
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            65.48;
                                                                          65.4%;
                                                          Score 17; DB
Pred. No. 5e+C
0; Mismatches
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Pred. No. 4.9e+02;
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                                                                          DB 9;
5e+02;
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                                                                                     Length 238
                                                        Indels
                                                                                                                                        mammalian
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RESULT 15

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Search completed: June 5, 2003, 15:49:03 Job time: 13.1212 secs
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                                                                                                                                                                                           US-08-882-431-14
                                                                                                                             Matches
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                                                                                                                                                                                                                                                                                                       TELEFAX: (301) 619-7714
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                         STRANDEDNESS:
TOPOLOGY: Unk
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh
                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Mark A. Olson
APPLICANT: Sina Bavari
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   uence 14, Application US/08882431
lication No. US20030009015A1
                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                                                                     REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                  NAME: Moran, John REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: UPPER DIVIDING DATE: June 25,
                                                                                                                                                                                                                                                                                                                                      TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: Microsoft Word 6.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET:
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                                                                178
                                                                                            1 KKXXXXXXLD 10
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T: US Army MRMC
FORT DETRICK
                                                                                                                                          Similarity
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                                                                KKSVTAQELD 187
                                                                                                                                                                                                                                                        Amino Acid
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                                                                                                                             Conservative
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                                                                                                                                                                                                          Peptide
                                                                                                                                                                                                                                        Unknown
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                                                                                                                                          65.4%;
40.0%;
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                                                                                                                                                                                                                                                                                                                                                                                 26,313
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                                                                                                                             0;
                                                                                                                                            Score 17; I
Pred. No. 5
                                                                                                                             Mismatches
                                                                                                                                          5e+02
                                                                                                                                                          Length 266;
                                                                                                                           Indels
                                                                                                                           0
                                                                                                                           Gaps
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GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compus
   Compugen Ltd
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OM protein - protein search, using sw model

Run on June 5, 2003, 15:24:01; Search time 9.84848 Seconds (without alignments) 97.613 Million cell updates/sec

Title: Perfect score: US-09-150-947F-14 26 1 KKXXXXXXID 10

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched:

Total number of hits satisfying chosen parameters: 283224

283224 seqs, 96134422 residues

Minimum DB DB seq length: 0 length: 2000000000

Maximum

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 s

summaries

Database : pir2:*
pir3:* pirl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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conserved uridylate	toxic sh	ribose-5-pho hypothetical	heat sho	transcription probable tran	conserve	3-methyl	H+-trans	cyclic r	probable	hypothet	hypothet
ed hypothet te kinase s	shock syndro shock syndro	bose-5-phosphate pothetical prote		iption regu	onserved hypothet	methyladeniné DN	ransporting tw	nucleotide-	Camp	ical	hetical prote

ALIGNMENTS

밁 QΥ A;Residues: 1-284 <SAU> A;Cross-references: EMBL:AL133498; PIDN:CAB63496.1; GSPDB:GN00066; SPDB:SPAC890.05 A;Experimental source: strain 972h(-); cosmid c890 conserved hypothetical protein SPAC890.05 with G-patch domain [imported] - fission ye C;Species: Schizosaccharomyces pombe C;Date: 09-Jun-2000 #sequence_revision 09-Jun-2000 #text_change 09-Jun-2000 A; Map position: A; Gene: SPDB: SPAC890.05 A; Molecule type: DNA A; Residues: 1-284 <S A; Accession: T50261 R;Saunders, D.; Harris, D.; McDougall, R.C.; Rajandream, M.A.; Barrell, B.G. submitted to the EMBL Data Library, December 1999 A; Status: preliminary; translated from GB/EMBL/DDBJ A; Reference number: 225052 Matches Query Match Genetics: Accession: 179 KKTSTGSALD 188 1 KKXXXXXXLD 10 Similarity 4; Conserv T5026 Conservative 73.1%; 40.0%; 0 Score 19; I Mismatches . B 2; . 6 Length 284; Indels 0 Gaps 0

RESULT 2 E84806

probable elongation factor [imported] - Arabidopsis thaliana C;Species: Arabidopsis thaliana (mouse-ear cress) C;Date: 02-Feb-2001 #sequence_revision 02-Feb-2001.#text_change 02-Feb-2001

C; Accession:

R;Lin, X.; Kaul, S.; M.; Koo, H.; Moffat, S.; Rounsley, S.D.; Shea, T.P.; Benito, M.I.; Town, C.D.; Fujii, C.Y fat, K.S.; Cronin, L.A.; Shen, M.; VanAken, S.E.; Umayam, L.; Tallon, n., W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Venter

A;Status: preliminary

A; Molecule type: DNA A; Residues: 1-378 <STO>

A; Cross-references: Genetics: GB:AE002093; NID:g3786016; PIDN:AAC67362.1; GSPDB:GN00139

A:Gene: At2g38560 A:Map position: 2 A; Map position:

Query Match
Best Local Similarity
Matches 4; Conserv Conservative 73.18; 0; Score 19; [Pred. No. 8. 8.8; 2 Length 378;

Mismatches 6; Indels 0, Gaps

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                                                                                                                                                                                                                                                                                                         R;Schulte, U.; Aign, V.; H
submitted to the Protein S
A;Reference number: Z24541
A;Accession: T48837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Title: Chloroplast gene organization deduced from complete sequence of liverwort March A;Reference number: A38014
A;Reference number: A38014
A;Contents: annotation; gene organization, sites, features
R;Umesono, K:; Inokuchi, H.; Shiki, Y.; Takeuchi, M.; Chang, Z.; Fukuzawa, H.; Kohchi, T.
J. Mol. Biol. 203, 29-331, 1988
A;Title: Structure and organization of Marchantia polymorpha chloroplast genome. II. Ger
A;Reference number: S01567; MUID:89068686; PMID:2974085
A;Accession: S01876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   submitted to the EMBL Data Library, October 1986 A; Reference number: A00150 A; Accession: A02733
                                                                                                                                                                                                                 A; Experimental source:
                                                                                                                                                                                                                                                    A; Molecule type: DNA
A; Residues: 1-159 <SCH>
                                                                                                                                                                                                                                                                                        A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                               C; Accession:
                                                                                                                                                                                                                                                                                                                                                                                                                                hypothetical protein 68B2.210 [imported] -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Genome:
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A;Residues: 1-100 <UME>
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                                                                                                                                                                                                             Cross-references: EMBL:AL353821; GSPDB:GN00112; NCSP:68B2.210; Experimental source: cosmid contig 68B2; strain 74
                                                                                                                                                             Map position:
                                                                                                                                                                                                                                                                                                                                                                                               Date: 05-May-2000 #sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Genome: chloroplast superfamily: Escherichia coli ribosomal protein S14
                                                                         Matches
                                                                                                          Query Match
                                                                                                                                           Superfamily: Neurospora
                                                                                                                                                                                Gene: NCSP:68B2.210
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                                                                       Similarity 4; Conserv
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   KKTTALQSLD
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he Protein Sequence I
                                                                       Conservative
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                                                                                                                                         hypothetical protein 68B2.210
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                                                                                        Score 18;
Pred. No.
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                                                                                                                                                                                                                                                                                                                                            Database,
                                                                                                                                                                                                                                                                                                                                          J.; Brandt, P.; Fartmann, B.; Holland, R.; Nyakatura
Database, April 2000
                                                                       Mismatches
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. 12;
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RESULT 7
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A;Title: Nucleotide sequence of the mitochondrial genome of Paramecium.
A; Reference number: S07725; MUID:90174913; PMID:2308823
A; Accession: S07748
                                                         hypothetical protein F20P5.23 [imported] - Arabidopsis thaliana C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change
                                                                                                                                                                                                                                                                                                                                                                C;Superfamily: Paramecium tetraurelia mitochondrion hypothetical protein
C;Keywords: mitochondrion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C;Species: mitochondrion Paramecium tetraurelia
C;Date: 31-Mar-1990 #sequence_revision 31-Mar-1990 #text_change
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A; Reference number: A82035;
A; Accession: A82401
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                  R; Theologis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: DNA
A; Residues: 1-161 <HEI>
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                                           C; Accession: A967
                                                                                                                                                                                                                                                                                                                                                                                                     A; Start codon: ATA
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                                                                                                                                                                                                                                                                                                                                                                                                                            A; Genetic code:
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\;Residues: 1-169 <PRI>
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                    A.; Ecker, J.R.; Palm,
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                                                           sis thallana (mouse-ear cress)
#sequence_revision 02-Mar-2001 #text_change 31-Mar-2001
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Pred. No.
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C.J.; Federspiel, N.A.; Kaul, S.; White, O.; Alon Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar,
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H.; Dragoi,
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I.; Sellers
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Chung, M.K.; Hughes, B.; F

Huizar,

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A; Reference number: A8548
A; Accession: A85646
A; Status: preliminary
A; Molecule type: DNA
A; Residues: 1-212 <STO>
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A;Gene:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nature 408, 816-820, 2000
A;Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, C.A.; Li, J.H.; Li, Y.; Lin, S.X.; Liu, Z.A.; Luros, J.S.; Maiti, F Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.
A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, Ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.
A;Title: Sequence and analysis of chromosome 1 of the plant Arabidopsis.
A;Reference number: A86141; MUID:21016719; PMID:11130712
A;Paterion: A96723
   A;Cross-references: GB:AE005174; NID:g12514373; PIDN:AAG55629.1; A;Experimental source: strain O157:H7, substrain EDL933 C;Genetics:
                                                                                                                                                             R;Perna, N.T.; Plunkett III, G.; Burland, V.; Mau, B.; Glasr
iller, L.; Grotbeck, E.J.; Davis, N.W.; Lim, A.; Dimalanta,
Nature 409, 529-533, 2001
                                                                                                                                                                                                                probable tet operon regulator C; Species: Escherichia coli C; Date: 16-Feb-2001 #sequence. C; Accession: A85646
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A85646
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A; Residues: 1-212 <HAY>
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A; Residues: 1-171 <STO>
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Best Local
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N.; Yasunaga, T.; Kuhara, S.;
8, 11-22, 2001
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15;
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imalanta, E.;
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RESULT 12
T14770
hypothetical
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R;Fleischmann, R.D.; Adams, M.D.; White, O.; Clayton, R.A.; Kirkness, E.F.; Ke; Gocayne, J.D.; Scott, J.; Shirley, R.; Liu, L.I.; Glodek, A.; Kelley, J.M.; D.M.; Brandon, R.C.; Fine, L.D.; Fritchman, J.L.; Fuhrmann, J.L.; Geoghagen, Science 269, 496-512, 1995
Science 269, 496-512, 1995
A;Authors: Gnehm, C.L.; McDonald, L.A.; Small, K.V.; Fraser, C.M.; Smith, H.O.; A;Title: Whole-genome random sequencing and assembly of Haemophilus influenzae A;Reference number: A64000; MUID:95350630; PMID:7542800
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C;Keywords: DNA
F;39-58/Region:
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                                                                                                                                                             A; Molecule type:
                                                                                                                                                                                 A;Status: nucleic
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.A.; Rose, D.J.; Mau,
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C;Accession: C64843
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C;Species: Escherichia coli
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helix-turn-helix motif
                                                                                                                                                                  DNA
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                                                                                                                                                 <TIGR>
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Mau, B.; Shao,
                                                                                                                                                                            acid sequence not shown; translation not shown
170
                                                                            69.2%;
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Pred. No.
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                                                               Mismatches
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protein DKFZp566E144.1 -

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C; Species: Chlamydia trachomatis
C; Date: 17-Apr-1993 #sequence_revision
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   Plasmid 23, 149-15
A; Title: Diversity
                                     R; Comanducci,
                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Molecule type: DNA
A;Residues: 175-247 <HAT>
A;Cross-references: EMBL:X06707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C; Superfamily: human conserved hypothetical protein DKFZp566E144.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Reference number: A; Accession: T14770
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                                                                                                               hypothetical protein 6 - Chlamydia trachomatis (serotype D)
                                                                                                                                        F37386
                                                                                                                                                    RESULT 14
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A;Experimental source: plasmid pCHL1
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A; Accession: S01924
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N;Alternate names: hypothetical protein P-10
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A; Residues: 1-237 <BLO>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A; Title: The structure of a plasmid of Chlamydia trachomatis A; Reference number: S01920; MUID:89013895; PMID:2845228
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Best Local S
Matches 4
                                                            ; Accession:
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Date: 20-Sep-1999 #sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            manducci, M.; Ricci, S.; Ratti, G. Microbiol. 2, 531-538, 1988
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                                                                                                                                                                                                                                                                                                                                                                codon: GIG
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                                                                                                                                                                                                                                                                                                                                                                                   plasmid
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                     1, M.; Ricci, S.; Cevenini, 149-154, 1990
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                                       R.; Ratti,
                                                                        17-Apr-1993 #text_change 17-Feb-1994
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C;Genetics:
                                                                                                                             A; Map position: linear chromosome
                                                                                                                                                                                                                                                                                                             A; Authors: Yoo, H.; Tao, ster, E.W.
                                                                                                                                                                                                                                                                                                                                                                                                                        hypothetical protein Atu4350 [imported] - Agrobacterium tumefaciens (strain C; Species: Agrobacterium tumefaciens C; Date: 11-Jan-2002 #sequence_revision 11-Jan-2002 #text_change 11-Jan-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Genome:
                                                                                                                                              A;Gene: Atu4350
                                                                                                                                                                               A;Cross-references: GB:AE008689; PIDN:AAL45144.1; PID:g17742817; GSPDB:GN00187
A;Experimental source: strain C58 (Dupont)
                                                                                                                                                                                                               A; Molecule type: DNA
A; Residues: 1-278 < KUR>
                                                                                                                                                                                                                                               A;Status:
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                                                                                                                                                                                                                                                                            A; Title: The Genome of the Natural Genetic Engineer A; Reference number: AB2577; PMID:11743193
                                                                                                                                                                                                                                                                                                                                         Karp, P.; Romero, P.; Zhang, S. Science 294, 2317-2323, 2001
                                                                                                                                                                                                                                                                                                                                                                        R;Wood, D.W.; Setubal, J.C.; Kaul, R.; Monks, D.; Chen, L.; Wood, G.E.; Chen, erage, G.; Gillet, W.; Grant, C.; Guenthner, D.; Kutyavin, T.; Levy, R.; Li, I
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A; Residues: 1-247 <COM>
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Matches
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                                                                              Similarity
KKLAATHTLD
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 193
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Maximum Match 100%
Listing first 45 summaries
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           Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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26
1 KKXXXXXXLD 10
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Gapop 10.0 , Gapext
          SwissProt_40:*
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     RR14_MARPO
NIJ1_HUMAN
NIJ1_MOUSE
NIJ1_RAT
YM13_PARTE
YCDC_ECOLI
TFOX_HAEIN
ORN_HUMAN
GP6D_CHLT
FLC1_PROMI
YAC1_PROMI
Y349_SCHPO
AXP3_SCHPO
AXYNA_STRLI
Y134_CAEEL
NIJ2_HOMAN
NIJ2_HOMAN
NIJ2_MOUSE
NIJ2_RAT
RL15_MYCGA
ATPX_ODOSI
3MGA_HAEIN
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3101. Chem. 272:21373-21380(1997).

FUNCTION: HOMOPHILIC CELL ADHESION MOLECULE TO FUNCTION: HOMOPHILIC CELL ADHESION AND FUNCTION OF OTHER TISSUES. CELL ADHESION
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pean Bioinformatics Institute. The
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Submitted (DEC-1999) to the EMBL/GenBank/DDBJ databases.
-i- FUNCTION: HOMOPHILIC CELL ADHESION MOLECULE THAT PROMOTES AXONAL
-GROWTH. MAY PLAY A ROLE IN NERVE REGENERATION AND IN THE FORMATION
AND FUNCTION OF OTHER TISSUES. CELL ADHESION REQUIRES DIVALENT
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                                                                               Eukaryota; Alveolata; Paramecium.
                                                                                                                                                           01-APR-1990 (Rel. 14, Created)
01-APR-1990 (Rel. 14, Last sequence up
01-APR-1990 (Rel. 14, Last annotation
Hypothetical 20.2 kDa protein (ORF13).
STRAIN-Stock
                   SEQUENCE FROM N.A.
                                                                                                                      Mitochondrion
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                                                        NCBI_TaxID=5888;
                                                                                                                                          Paramecium tetraurelia
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Oshima T., Aiba H., Baba T., Fujita K., Hayashi K., Honjo A.,
Oshima T., Aiba H., Baba T., Fujita M., Kanai K., Kashimoto K.,
Ikemoto K., Inada T., Itoh T., Kajihara M., Kanai K., Kashimoto K.,
Kimura S., Kitagawa M., Makino K., Masuda S., Miki T., Mizobuchi K.,
Mori H., Motomura K., Nakamura Y., Nashimoto H., Nishio Y., Saito N.,
Sampei G., Seki Y., Tagami H., Takemoto K., Wada C., Yamamoto Y.,
Yano M., Horiuchi T.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FI
STRAIN-K12;
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                                       This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the EM the European Bioinformatics Institute. There are no restruse by non-profit institutions and increase and increase are no restructions.
                                                                                                                                                                                   "A 718-kb DNA sequence of the Ecorresponding to the 12.7-28.0 DNA Res. 3:137-155(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Blattner F.R., Plunkett G. III, Bloch C.A., Perna N.T., Burland Riley M., Collado-Vides J., Glasner J.D., Rode C.K., Mayhew G.F. Gregor J., Davis N.W., Kirkpatrick H.A., Goeden M.A., Rose D.J.,
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P75899;
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MEDLINE-97426617; PubMed-9278503;
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"Nucleotide sequence of the mitochondrial
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                                                                                                                                                                             Williams P.M., Bannister L.A.,
                                                                                                                                                                                                 MEDLINE-95050244;
                                                                                                                                                                                                                                                             Science 269:496-512(1995)
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"Identification of a DNA transformation
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Bacteriol. 176:6789-6794(1994).
- FUNCTION: REQUIRED FOR DNA TRANSFOR
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Q9Y3B8; Q9UFY7;
30-MAY-2000 (Rel. 39, Created)
16-OCT-2001 (Rel. 40, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Oligoribonuclease, mitochondrial precursor (E
                                                                                                                                                                                                                                                                   "Towards a catalog of human genes and proteins: sequencing analysis of 500 novel complete protein coding human cDNAs." Genome Res. 11:422-435(2001).
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VARIANT
                        Nguyen L.H., Erzberger J.P., Root J., WI
"The human homolog of Escherichia coli of
single-stranded RNA and DNA oligomers.",
J. Biol. Chem. 275:25900-25906(2000).
-I- FUNCTION: 3'-TO-5' EXORIBONUCLEASE S
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Ansorge W., Boecher M., Bloecker H., Bauersachs S., Blum
Lauber J., Duesterhoeft A., Beyer A., Koehrer K., Strack
Mewes H.-W., Ottenwaelder B., Obermaler B., Tampe J., He
Wambutt R., Korn B., Klein M., Poustka A.;
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MEDLINE=20272150; PubMed=10810093;
Lai C.-H., Chou C.-Y., Chang L.-Y., Liu C.-S., Lin
"Identification of novel human genes evolutionarily
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TIGR;
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                                                                                                                                                                                                               CHARACTERIZATION.
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Mammalia; Eutheria;
                                                                                                                                                                              MEDLINE=20408924; PubMed=10851236;
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4A6E30E64008CC3F CRC64;
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RESULT 9
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P10560; P08787; Q46433;
01-NOV-1988 (Rel. 09, Created)
01-UTL-1989 (Rel. 11, Last sequence upda
16-OCT-2001 (Rel. 40, Last annotation up
Virulence plasmid protein pGP6-D (Protein pGP6)
Chlamydia trachomatis.
Plasmid pLGV440, Plasmid pCHL1, and Plas
Bacteria; Chlamydiales; Chlamydiaceae; (
Nucleic
[3]
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VARSPLIC
MUTAGEN
                                               STRAIN=L1/440/LN; PLASMID=pLGV440; MEDLINE=8823998; PubMed=2836808; Hatt C., Ward M.E., Clarke I.N.; "Analysis of the entire nucleotide sequence of the cryptic Chlamydia trachomatis serovar L1. Evidence for involvement
                                                                                                                                                                    STRAIN-L2/434/Bu; PLASMID-pLGV440; MEDLINE-89013895; PubMed-2845228; Commanducci M., Ricci S., Ratti G.; "The structure of a plasmid of Chlamydia required for growth within mammalian cell mol. Microbiol. 2:531-538(1988).
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                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
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                               Linderoth N.A., Calendar R.;
                                                             SEQUENCE FROM N.A.
MEDLINE-92115571;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Characterization and seque of Chlamydia trachomatis.";
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MEDLINE-88177106;
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MEDLINE-90301796; PubMed-2194229;
of bacteriophage
"Nucleotide sequence of of bacteriophage P2.";
                                                                                                                                                   Bacteriophage P2. Viruses; dsDNA viruses,
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BL; X06707; CAA29897.1;
JU3321; AAA91574.1;
BL; M19487; AAB92591.1;
R; S01924; S01924
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European Bioinformatics Institute
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             PRINTS;
                                                  InterPro; IPR001492; FlagellinN. InterPro; IPR001029; Flagellin_C.
                                                                             EMBL; AF221596; AAA62396.1;
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                                                                                                                                                                                                                                         FORM THE FILAMENTS OF BACTERIAL FLAGELLA,
INDUCTION: ALTHOUGH SWIMMER CELLS HAVE ONLY A FEW FLAGELLA,
ELONGATED SWARMER CELLS RE PROFUSELY COVERED BY THOUSANDS (
FLAGELLA SYNTHESIZED SPECIFICALLY IN RESPONSE TO GROWTH ON
                                                                                                                                                                                                                                                                                           n Proteus mirabilis.";
148:33-41(1994).
FUNCTION: FLAGELLIN IS THE SUBUNIT PROTEIN WHICH
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                                                                                                                                                                                                                                                                                   FORM THE FILAMENTS OF
                                                                                                                                                                      SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBL outstation -
                                                                                                                                                                                                                              SURFACES OR IN HIGHLY VISCOUS LIQUIDS.
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SIMILARITY: STRONG, TO PHAGE HP1 PROTEIN ORF15 AND TO THE E.COLI
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S16410; S16410.
                                                                                                     s requires a license agreement (See http://www.isb-sib.ch/announce/an email to license@isb-sib.ch).
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THE Q, P AND M PROTEINS ARE NEEDED TO PACKAGE DNA INTO
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Y349_MYCPN
ID 47349_M
AC P75253
DT 01-NOV
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OS MYCOPI
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RN [1]
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                                                                                                                                                                                                 01-OCT-1993 (Rel. 27
15-JUN-2002 (Rel. 41
Actin-like protein 3
ACT2 OR SPAC630.03.
                                                                                                                                                                                                                                                                                                                                                                 SCHPO
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16-OCT-2001 (Rel. 40, Last
Hypothetical protein MG349
MPN525 OR MP317.
                                                                                                               Schizosaccharomycetales; Schizosaccharomyces.
                                                                                                                                                  Schizosaccharomyces pombe (Fission yeast)
Eukaryota; Fungi; Ascomycota; Schizosaccharomycetes;
                                                                                                                                                                                                                                                                                                                                               ARP3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Flagella; Multigene family. SEQUENCE 365 AA; 39093 MW;
MEDLINE=92108083;
Lees-Miller J.P.,
                                            SEQUENCE FROM N.A.
                                                                                                                           Eukaryota; Fungi; Ascomycota; Schizosaccharomyceteeschizosaccharomycetales; Schizosaccharomycetaceae;
                                                                                                                                                                                                                                                                                                  01-OCT-1993
                                                                                                                                                                                                                                                                                                                     ARP3_SCHPO
P32390;
                                                                                          NCBI_TaxID=4896;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hypothetical SEQUENCE 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         entities requires a license agreement (See http://www.isb-sib.or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   use by non-profit institutions as long as its content modified and this statement is not removed. Usage by an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 STRAIN=ATCC 29342 / M129;
MEDLINE=97105885; PubMed=8948633;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EMBL; AE000029; AAB95965.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nucleic Acids Res. 24:4420-4449(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Complete sequence analysis of the genome pneumoniae.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Herrmann R.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Himmelreich R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bacteria; Firmicutes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mycoplasma
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBL outstation - European Bioinformatics Institute. There are no restrictions on its
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 197
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4; Conserv
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                                                                                                                                                                                                                                                                                              (Rel. 27, Created)
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  Henry G., Helfman D.M.;
                    PubMed=1729722;
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48246 MW; A4CF2C9802316F23 CRC64;
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annotation update)
homolog (G12_orf413).
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Pred. No.
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Pred. No.
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                                                                                                                                                                                                                                             update)
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17;
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RESULT 14
XYNA_STRLI
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RA Gentles S., Goble A., Hamlin N., Harris D., Hidalgo J., Hodgson G.,
RA Holroyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
RA Holroyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
RA James K., Jones M., Leather S., McDonald S., McLean J.,
RA James K., Jones M., Leather S., McDonald S., McLean J.,
RA Mooney P., Moule S., Mungall K., Murphy L., Niblett D., Odell C.,
RA Mooney P., Moule S., Mungall K., Murphy L., Niblett D., Odell C.,
RA Mooney P., Moule S., Mungall K., Murphy L., Niblett D., Odell C.,
RA Mooney P., Moule S., Mungall K., Murphy L., Niblett D., Odell C.,
RA Mutherford K., Rutter S., Saunders D., Seeger K., Sharp S.,
RA Skelton J., Simmonds M., Squares R., Squares S., Stevens K.,
RA Taylor K., Taylor R.G., Tivey A., Walsh S.V., Warren T., Whitehead S.,
RA Woodward J., Volckaert G., Aert R., Squares S., Stevens K.,
RA Woodward J., Vanstreels E., Rieger M., Schaefer M., Mueller-Auer S.,
RA Weltjens I., Vanstreels E., Rieger M., Schaefer M., Mueller-Auer S.,
RA Gabel C., Fuchs M., Fritzc C., Holzer E., Moestl D., Hilbert H.,
RA Goffeau A., Cadieu E., Dreano S., Gloux S., Lelaure V., Mottier S.,
RA Golfeau A., Cadieu E., Dreano S., Gloux S., Lelaure V., Mottier S.,
RA Gallbert F., Aves S.J., Xiang Z., Hunt C., Moore K., Hurst S.M.,
RA Daga R.R., Cruzado L., Jimenez J., Sanchez M., del Rey F., Benito J.,
RA Daga R.R., Cruzado L., Jimenez J., Sanchez M., del Rey F., Benito J.,
RA Daga R.R., Cruzado L., Jimenez J., Sanchez M., del Rey F., Benito J.,
RA Cerrutti L., Lowe T., McComble W.R., Paulsen I., Potashkin J.,
RA Shpakovski G.V., Ussery D., Barrell B.G., Nurse P.;
The genome sequence of Schizosaccharomyces pombe. T.,
RC -1-- FILOZOFON DART OF A COMDIEX INDICATED IN THE CONTENT OF ACTION
                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
Matches 4
   XYNA_STRLI $\ \text{P26514; P96464;} \ \text{O1-AUG-1992 (Re)} \ \ 30-MAY-2000 (Re)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pfam; PF00022; actin; 1.
SMART; SM00268; ACTIN; 1.
PROSITE; PS01132; ACTINS_ACT_LIKE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation—the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; M81068; -; NOT_ANNOTATED_CDS.
EMBL; AL109832; CAB52725.1; -.
PIR; A41790, A41790.
InterPro; IPR004000; Actin_like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Structural
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Sgouros J., Peat N., Hayles J., Baker S., Basham D., Bowman
Brooks K., Brown D., Brown S., Chillingworth T., Churcher C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE-21848401;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUBUNIT: BELONGS TO A COMPLEX COMPOSED OF ARP2, ARP3, P4 P34-ARC, P21-ARC, P20-ARC AND P16-ARC (BY SIMILARITY). SIMILARITY: BELONGS TO THE ACTIN FAMILY. ARP3 SUBFAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FUNCTION: PART OF A COMPLEX IMPLICATED IN THE CONTROL OF POLYMERIZATION IN CELLS (BY SIMILARITY). MAY BE INVOLVED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FUNCTION: PART
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                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
4; Conser
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                                                                                                                                                                                                                                                                                                                                                           KKXXXXXLD
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427 AA;
   (Rel.
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                                                                                                              STANDARD;
   23, Created)
39, Last seq
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47373 MW; C
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sequence update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 18;
Pred. No.
                                                                                                              PRT;
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"Crystal Structure, at 2.6-A resolution, of the Streptomyces lividans xylanase A, a member of the F family of beta-1.4-D-glycanases.";

J. Biol. Chem. 269:20811-20814(1994)

-I- FUNCTION: CONTRIBUTES TO HYDROLYSE HEMICELLULOSE, THE MAJOR COMPONENT OF PLANT CELL-WALLS. XINA AND XINB SEEM TO ACT SEQUENTIALLY ON THE SUBSTRATE TO YIELD XYLOBIOSE AND XYLOSE
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use by non-profit institutions as long as its content
modified and this statement is not removed. Usage by ar
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Endo-1,4-beta-xylanase A precursor (EC 3.2.1.8) (Xylanase
                                                                                                                                                                                                                                                                                                                                                         PRINTS; PRO0134; GLHYDRL SMART; SM00458; RICIN; 1
                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; IPR001000; Glyco_hydro_10.
InterPro; IPR000772; Ricin_B_lectin.
Pfam; PF00331; Glyco_hydro_10; 1.
Pfam; PF00652; Ricin_B_lectin; 3.
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PDB; 1XAS; 31-MAY-95.
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PROSITE; PS50231; RICIN_B_LECTIN; 1.
Xylan degradation; Hydrolase; Glycosidase; Signal; Lectin;
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PATHWAY: Xylan degradation
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SIMILARITY: CONTAINS 1 RICIN B-TYPE LECTIN DOMAIN.
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Hypothetical protein; ATP-binding; Repeat.
Hypothetical protein; ATP-binding; Repeat.
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NP_BIND 574 581 ATP (POTENTIAL).
SEQUENCE 837 AA; 93069 MW; 133528B9D0987103 CRC64;
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Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
Saccharomycetales; Saccharomycetaceae; Saccharomyces.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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Q9ans7 vibrio harv
Q8wuv5 homo sapien
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       Tang C.,
Carninci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN-CV. COLUMBIA; MEDLING-20083487; PubMed=10617197; MEDLING-20083487; PubMed=10617197; Lin X., Kaul S., Rounsley S.D., Shea T.P., Benito M.-I., Town C.D., Fujii C.Y., Mason T.M., Bowman C.L., Barnstead M.E., Feldblyum T.V., Buell C.R., Ketchum K.A., Lee J.J., Ronning C.M., Koo H., Moffat K.S., Cronin L.A., Shen M., Vanaken S.E., Umayam L., Tallon L.J., Gill J.E., Adams M.D., Carrera A.J., Creasy T.H., Goodman H.M., Somerville C.R., Copenhaver G.P., Preuss D., Nierman W.C., White O., Eisen J.A., Salzberg S.L., Fraser C.M., Venter J.C.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Arabidopsis thaliana (Mouse-ear cress).

Bukaryota; Viridiplantae; Streptophyta; Embryophyta;

Spermatophyta; Magnoliophyta; eudicotyledons; core e

eurosids II; Brassicales; Brassicaceae; Arabidopsis.

NCBI_TaxID=3702;
      SEQUENCE FROM N.A.
Yamada K., Banh J., Chan M.M., Chang Yamada K., Goldsmith A.D., Lee J.M., Tang C., Toriumi M., Wu H.C., Yamamur Carninci P., Chen H., Cheuk R., Hayas
                                                                                         Arabidopsis thaliana (Mouse-ear cress).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosidae;
eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                  01-MAR-2002 (TrEMBLrel. 20, 01-MAR-2002 (TrEMBLrel. 20, 01-JUN-2002 (TrEMBLrel. 21,
                                                                                                                                                                                                                                                                                                                                                                                                                                  SMART;
                                                                                                                                                                                                                                                                                                                                                                                                                                              InterPro; IPR003617; TFS2_Centre.
Pfam; PF01096; TFIIS; 1.
SMART; SM00510. TFIIS; 1.
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01-MAY-1999 (TremBLrel. 10,
01-MAR-2002 (TremBLrel. 20,
Putative elongation factor.
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                                                                                                                                            Putative elongation AT2G38560.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN-CV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Sequence and analysis of chromosome thaliana.";
                                                                              NCBI_TaxID-3702;
                                                                                                                                                                                                                      92XA8
                                                                                                                                                                                                                                                                                                                                                                                  Elongation
SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Submitted (MAR-2000)
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SM00509; TFS2N; 1.
SM00440; ZnF_C2C2; 1.
E; PS00466; TFIIS; 1.
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                                                                                                                                                                                                                                                                                                           KKXXXXXXLD
                                                                                                                                                                                                                                                                                                                                                                                  factor.
378 AA;
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                                                                                                                                                                    Created)
Last sequence update)
Last annotation updat
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Pred. No.
                   Yamamura
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      Chang C.H., Chang E.
J.M., Onodera C.S., (
Kamamura Y., Yu G., Bu
Hayashizaki Y., Ish
                                                                                                                                                                                                                                                                                                                                                                                  9A176DC31FA8E885 CRC64;
                                                                                                                                                                                                                                                                                                                                 Mismatches
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edons; core e
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E
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                   Bowser
                                Quach
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                                           Dale J.M.,
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L.,
J., Jones
                            H.L.,
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Best Local 9
Matches 4
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Best Local
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Meyers M.C., Miranda M., Narusaka M., Nguy
Sakurai T., Satou M., Seki M., Shinn P., S
Davis R.W., Ecker J.R., Theologis A.;
"Full Length cDNA of gene At2g38560 (GI:LE
Submitted (JAN-2002) to the EMBL/GenBank/I
EMBL; AY07/322; AAL67018.1;
InterPro; IPR001222; TFIIS.
InterPro; IPR003618; TFS2_centre.
InterPro; IPR003618; TFS2_N.
Pfam; PF01096; TFIIS; 1.
SMART; SM005010; TFS2M; 1.
SMART; SM005010; TFS2M; 1.
SMART; SM005010; TFS2M; 1.
SMART; SM005010; TFS2M; 1.
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037174;
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01-DEC-2001
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Liao J.T., Hsu Y.H.;
"Full-length sequence of inf
Submitted (AUG-1997) to the
EMBL; AF018156; AAB70562.1;
                                                   Bamboo mosaic virus.
Viruses; ssRNA positive-strand
NCBI_TaxID=35286;
                                                                                                                                                   ORF1-155k.
                                                                                                                                                                                                                                 Q65005;
01-NOV-1996
                                                                                                                                                                                                                                                                                          Q65005
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Viruses; ssRNA posit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-JAN-1998
01-JAN-1998
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SEQUENCE FROM N.A
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InterPro; IPR000606; Viral_helicasel.
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4; Conserv
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378 AA;
                                                                                                                                                                        (TrEMBLrel. (TrEMBLrel.
                                                                                                                                                                                                                                                                                             PRELIMINARY;
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Satou M., Seki M., Shinn P.,
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19,
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19,
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the EMBL/GenBank/DDBJ databases.
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Last
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Pred. No.
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Pred. No.
                                                                                                                                                                                                                                                                                             PRT;
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                                                                                          viruses,
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annotation
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79;
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26;
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                                                                                    stage;
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RESULT 7
092637
ID 0926
AC 0926
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Lin N., Lin B., Lo N., Hu C., Chow T., Hsu
"Nucleotide sequence of the genomic RNA of
J. Gen. Virol. 75:2513-2518(1994).
EMBL; D26017; BAA05033.1; -.
InterPro; IPR00178B; RNA_dep_RNApol2.
InterPro; IPR0018B; RNA_dep_RNApol2.
Pfam; PF00978; RNA_dep_RNApol2; 1.
Pfam; PF00978; RNA_dep_RNApol2; 1.
                                                                     Q9ZG37;
Q1-MAY-1999
Q1-MAY-1999
Q1-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q8UZ48;
Q8UZ48;
01-MAR-2002 (
01-MAR-2002 (
                                                                                                                                                                                                                                                                                        Pfam;
Pfam;
                                                                                                                                                                                                                                                                                                                                  Yang C.-C., Liu J.-S., Lin C.-P., Lin N.-S.;
"Nucleotide sequence and phylogenetic analysis of a bamboo mosaic
potexvirus isolate from common bamboo (Bambusa vulgaris McClure).";
Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; L77962; AAL40030.1; -.
           Chlamydia trachomatis.
Plasmid pCHL1.
Bacteria; Chlamydiales
NCBI_TaxID=813;
                                                        01-MAY-1999 (TrEMBLrel. 10, Created)
01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-UN-2002 (TrEMBLrel. 21, Last annotation updat
Hypothetical 5.2 kDa protein (Fragment).
                                                                                                                     Q9ZG37
                                                                                                                                                                                                                                                                                                            InterPro; IPR001788; RNA_dep_RNApol2.
InterPro; IPR000606; Viral_helicasel.
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                                                                                                                                                                                                                                                                                                                                                                                                                                             Viruses; ssRNA positive-strand viruses,
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Putative, putative, Bamboo mosaic virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN-BAMV-0;
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Hsu Y.-H.;
                                                                                                                                                                                                                                                                            SEQUENCE
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                                                                                                                                                                                                                                                                                                                       InterPro; IPR001788;
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                                                                                                                                                                                                                                                                         PF00978; RNA_dep_RNApol2;
PF01443; Viral_helicase1;
NCE 1365 AA; 155222 MW;
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4; Conserv
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                       Chlamydiales;
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(TrEMBLrel. 20,
(TrEMBLrel. 21,
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                                                                                                                     PRELIMINARY;
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                        Chlamydiaceae; Chlamydia.
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Last annotation update)
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35449D5E80026633 CRC64;
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bamboo
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                                                                     update)
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Matches 4
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01-JUN-2001
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01-JUN-2002 (TrEMBLrel.
01-JUN-2002 (TrEMBLrel.
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EMBL; AF087330; AAD04105.1; -
InterPro; IPR005350; UPF0137.
Pfam; PF03677; UPF0137; 1.
Hypothetical protein; Plasmid.
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"Gene identification
sequencing.";
                               "Cloning a harvey1.";
                                                   SEQUENCE FROM N.A.
Lin Y.H., Miyamoto C.M.,
"Cloning and functional
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bactería; Proteobactería;
Escherichia.
NCBI_TaxID=562;
                                                                                                                  Vibrio harveyi.
Bacteria; Proteobacteria;
NCBI_TaxID=669;
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STRAIN-L2 434B;
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                   Biochim.
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AF321123; AJ
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4; Conserv
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108 AA;
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9. Acta 0:0-0(2001).
AAK09362.1; -.
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Last sequence up
Last annotation
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Last annotation updat
sin GPQ (Fragment).
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Pred. No. 12;
0; Mismatches
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                                                   n E.A.
                                                                                                                                      subdivision;
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12;
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databases.
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RESULT 11

Q9KL3

ID Q9KL3

AC NCBL

AC SALE

AC G1L1

A
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P SEQUENCE FROM N.A.

C STRAIN-EL TOR N16961 / SEROTYPE 01;

XX MEDLINE-20406833; PubMed-10952301;

RA Heidelberg J.F., Eisen J.A., Nelson W.C., Clayton R.A., Gwindown R.J., Haft D.H., Hickey E.K., Peterson J.D., Umayam RA Gill S.R., Nelson K.E., Read T.D., Tettelin H., Richardson RA Gill S.R., Nelson K.E., Read T.D., Bass S., Qin H., Dragoi I., Bass S., Qin H., Dragoi I., Underback T., Fleischmann R.D., Nierman W.C., RA McDonald L., Utterback T., Fleischmann R.D., Nierman W.C., Ra McDonald C., Smith H.O., Colwell R.R., Mekalanos J.J., Tarbonger
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Best Loc
Matches
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Q9KL32;
Q1-OCT-2000
01-OCT-2000
01-DEC-2001
                                                                                       Nature
EMBL; A
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Submitted (DEC-2001) to the
EMBL; BC019336; AAH19336.1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Vibrio cholerae.
Bacteria; Proteobacteria;
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Eukaryota; Metazoa; (
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01-MAR-2002 (TrEMBLrel. 20, Last sequence
01-MAR-2002 (TrEMBLrel. 20, Last annotation
Hypothetical 17,0 kDa protein (Fragment).
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                                                               e 406:477-483(2000).
AE004419; AAF96814.1;
VCA0917; -.
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4; Conserv
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Pred.
                     A478003D189B4288 CRC64;
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                                                                                                                                                                                           , Dragoi I., Sellers P. ierman W.C., White O., anos J.J., Venter J.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 160
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                                                                                                                                                                                                                                                                                                                    Gwinn M.L.,
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                                                                                  Kawai J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE
                                     Aizawa K.,
                                                               Arakawa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRAIN-CV.
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SEQUENCE FROM N.A.
STRAIN-C57BL/6J; TISSUE-PANCREAS;
MEDLINE-21085660; PubMed-11217851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Osborne B.I., Vysotskaia V.S., Toriumi M., Conway A.B., Conway A.R., Dewar K., Feng J Shinn P., Sun H., Davis R.W., Ecker J.R.,
                                                                                                                                                Mus musculus (Mouse).
Eukaryota; Metazoa; C
Mammalia; Eutheria; F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Arabidopsis thaliana (Mouse-ear cress).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta;
Spermatophyta; Magnollophyta; eudicotyledons; core eueurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Submitted (JUN-1997) to the EMBL; AC002062; AAB61109.1; InterPro; IPR003822; PAH.
., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka ., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
4; Conserv
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(TrEMBLrel.)
                                                                                                                                                                                                      (TTEMBLrel. 17, Created)
(TTEMBLrel. 17, Last sequence update)
(TTEMBLrel. 21, Last annotation update)
ik protein (RIKEN cDNA 1810038D15 gene).
                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
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19992 MW;
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J., Kim C., Kurt;
, Federspiel N.A.,
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DBJ databases.
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                                                                                                                                                 Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              databases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 171;
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                                                                                                                                                Euteleostomi;
; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N.A.,
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ALD ARC RAP RAPARATE 
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Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
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Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
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Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.,

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                           Hayashi T., Makino K., Ohnishi M., Kurokawa K., Ishii Han C.-G., Ohtsubo E., Nakayama K., Murata T., Tanaka Iida T., Takami H., Honda T., Sasakawa C., Ogaswara N. Kuhara S., Shiba T., Hattori M., Shinagawa H.; "Complete genome sequence of enterohemorrhagic Escheri O157:H7 and genomic comparison with a laboratory strai DNA Res. 8:11-22(2001).
                                                                                                                                                                                                                                                                                                                                                         Grotbeck E.J., Davis N.W., Lim A., Dina Apodaca J., Anantharaman T.S., Lin J., Welch R.A., Blattner F.R.; "Genome sequence of enterohaemorrhagic Nature 409:529-533(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Perna N.T., Plunkett G. III, Burland V., Mau B., Glasner J.D., Rose D.J., Mayhew G.F., Evans P.S., Gregor J., Kirkpatrick H.A., Posfai G., Hackett J., Klink S., Boutin A., Shao Y., Miller L., Grotbeck E.J., Davis N.W., Lim A., Dimalanta E.T., Potamousis K., Apodaca J., Anantharaman T.S., Lin J., Yen G., Schwartz D.C.,
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Hayashizaki Y.;
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MGI:1916430; 1810038015Rik.
1PRO: IPRO00520; Exonuclease.
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EMBL; AF093575; AAC72364.1; -. SEQUENCE 215 AA; 23641 MW; 00B59B
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AAB37922	AAB37920	AAW88037	AAY13741	AAY32872	AAY32860	AAY30593	AAY30549	AAY39889	AAY43494	3	AAY50605	060	AAW56197	618	AAW56225	AAW56245	AAW48589	AAW71120	AAW64738	AAW25173	AAW25193	AAW25187	AAW31143	AAW39130	AAR99827	AAR99825	AAR99823	AAW11094	AAR64722	AAR64556	AAR70472	AAR82907	AAR48960	AAR44666
			•	Fibronectin protei	Fibronectin protei		ro.	Asparaginyl endope	Linker for dual av	Ω.	Resin bound cyclic	5	1-inflam	۰	Anti-inflammatory	Anti-inflammatory	Integrin receptor					LDV-peptide capabl	rget	IL-16 5' en	chemokine	chemok 1	Active domain from		de	μ	ത	m	-3 truncated	Platelet aggregati

ALIGNMENTS

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N-PSDB; AAN10059. Aspartame prodn. from synthetic polypeptide - produced by cloned microorganism	WPT; 1981-72133D/40.	Rose JE, White TJ, Bahl CP;	(CETU-) CETUS CORP.	14-MAR-1980; 80US-0130462.			23-SEP-1981.	EP36258-A.		Synthetic.	aspartame.	Aspartyl-phenylalanine methyl ester; artificial sweetener;	Sequence of synthetic polypeptide for the prodn. of aspartame.	(*************************************	16-AUG-2002 (updated)		AAP10185;		AAP10185 standard; Protein; 2 AA.	LT 1 0185

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RESULT 2
AAB37936
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                                                                                                              This invention relates to a trypsin modulating oostatic factor (TMOF) compound. The compound specifically does not include the TMOF analogue peptides represented by AAB37942 - AAB37949. Sequences AAB37900 - AAB37941 are TMOF analogues which may be included in the composition. The TMOF compound has pesticidal activity and is an inhibitor of pest digestive enzyme synthesis. The TMOF compound is useful for controlling the second controlling and the second controlling that the controlling that the controlling that the second controlling the second controlling that the second controlling that the second controlling that the second controlling the second controlling that the second controlling the second controlling that the s
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(Updated on 16-AUG-2002 to add missing OS field.)
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                                                                                                                                                                                                                                                                                                                                                                 Claim
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                    ests such as mosquito larvae, coleopterans, lepidopterans, dipterans lood-sucking insects of order Diptera, suborder Nematocera, family olicidae or subfamily Culicinae, Corethrinae, Ceratopogonidae and
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                                                                              The inventors claim hhpGRF fragments used for the synthesis of hpGRF using the method somatocrinin can be obtd. on a large scale with good yield and good purity. The prod. is used in man for the treatment of dwarfism and retarded growth and for anabolic protein deficiencies. In animals it is useful for promoting wt. growth for increased prodn., lactation etc. This index is based on EP-122818,
                                                                                                                                                                                                                                                                                                                                                                                                                      Hormone; anabolic
                                                                                                                                                                                            WPI;
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                                                      Sequence
                                                                                                                                              Claim 4;
                                                                                                                                                                peptide
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21-FEB-1983;
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                                                                                                                                                                                                            Demarne H,
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                 40.0%; Silarity 100.0%; Conservative 0;
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                                        Saiki I, Nishi N,
                                                                                                                                                                                                                                                                                    EP347931-A.
                                                                                                                                                                                                                                                                                                                                 Cell adhesion;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antiviral; M2; poliovirus; polio; heatitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antiviral agent
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                                                                                                                                                                                       23-JUN-1989;
                                                                                                                                                                                                                                       27-DEC-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                   29-MAY-1990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
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                                                                                        (AZUM/) AZUMA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10 D 10
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                                                                                                                                                                                                                                                                                                                                                                               cell-adhesive protein.
                                                                                                                                                                                                                                                                                                                                 anti-metastatic agent;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          88JP-0228843
                                                                                                                                     88JP-0156133
                                                                                                                                                                                       89EP-0111468
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                                          Azuma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   entry)
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                                          H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 6; DB 1; Pred. No. 7.4
0; Mismatches
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                                          S
                                                                                                                                                                                                                                                                                                                               immunomodulation; core repeat.
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/.4e+05;
0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hepatitis virus
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RESULT 6
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Best Local 9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peptide core is repeated 2-20 times to form a cell-adhesive protein of mol. wt. 1,500-5,000. The protein is an (ant)agonist of cell-adhesive proteins such as fibronectin. It has high antimetastatic activity against cancer and can be used in immunomodulation, wound healing, platelet aggregation inhibition and alleviation of neuro-disorders. See also AAR00722.
                  peptide are also provided, comprising C-terminal truncations, N-terminal truncations, or modifications of specific amino acids, e.g. the most potent Ras inhibitor is accounted acronoma, exocrine pancreatic carcinoma and myeloid leukaemias. Ras complexed with GTP can bind GAP and this is thought to be the important step in the
                                                                                                                              The peptide corresponds to a C- and N-terminal truncated version the prod. of the Harvey ras oncogene from residues 17-44, i.e. fi residues 30-32. The peptide is capable of binding to GTPase
                                                                                                                                                                                                               Synthetic peptide inhibitors of Ras-GAP interaction antitumour agents against e.g. colorectal carcinoma pancreatic carcinoma and myeloid leukaemia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Polypeptide with repeated as anti-metastatic agent f cell-adhesion proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTPase; activating protein; GAP; oncogenesis; cancer; truncated;
colorectal; exocrine pancreatic; myeloid leukaemia; adenyl acylase.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim
                                                                                                      activating protein (GAP) thus inhibiting Ras activation by GAP a inhibiting Ras-dependent cell transformation. Derivs. of the Ras
                                                                                                                                                                                      Claim 3; Page 7; 31pp; English.
                                                                                                                                                                                                                                                                                                  Freidinger RM,
                                                                                                                                                                                                                                                                                                                                                       24-DEC-1990;
                                                                                                                                                                                                                                                                                                                                                                                  16-DEC-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Harvey Ras inhibitor - Ras
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-JAN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR25615 standard; peptide;
                                                                                                                                                                                                                                                                                                                            (MERI ) MERCK
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1; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
            activity
                                                                                                                                                                                                                                                                                                                                                        90US-0632891
                                                                                                                                                                                                                                                                                                                                                                                  91EP-0311658
                                                                                                                                                                                                                                                                                                                             CO INC
                                                                                                                                                                                                                                                                                               Garsky VM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               agent for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
            of Ras.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sequences
for cancer
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Pred. No.
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            The peptide is also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of cell adhesion
and agonist or ar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 11,
7.4e+05;
0;
                                                                                                                                                                                                                                                                                                  Schaber MD,
                                                                                                                                                                                                                                carcinoma,
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                                                                                                                                                                                                                                                                                                 Sigal IS;
                                                                                                                                                                                                                                exocrine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein
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interaction

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RESULT 8
AAR30728
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AAR36707
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Best Local
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Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                        The sequence is that of an RGD-conty peptide which is used in a method for prevention of adhesion formation for a time sufficient to permit tissue repair. The method is used for minimising or preventing adhesion formation, partic. in the peritoneum following surgery, but also for e.g. cardiovascular, orthopedic, thoracic, ophthalmic, CNS and other uses. In addn. The peptide inhibits platelet aggregation and does not induce inflammation or trauma
AAR30728 standard; peptide; 3 AA.
                                                                                                                                                                                                                                       Prevention of adhesion formation, padministering a RGD-contg. peptide
                                                                                                                                                                                                                                                                 WPI; 1993-167381/20.
                                                                                                                                                                                                                                                                                                                     07-NOV-1991;
                                                                                                                                                                                                                                                                                                                                                                                                         platelet aggregation; cardiovascular;
ophthalmic; CNS; use.
                                                                                                                Sequence
                                                                                                                                                                                                             Example; Page 18; 22pp;
                                                                                                                                                                                                                               administering a tissue repair
                                                                                                                                                                                                                                                                                    Dizerega GS,
                                                                                                                                                                                                                                                                                                                                      06-NOV-1992;
                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                           Tissue repair; peritoneum;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Adhesion formation prevention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR36707;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR36707 standard; peptide; 3 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                adenyl acylase.
                                                                                                                                  at the site of administration.
                                                                                                                                                                                                                                                                                                     (UYSC-) UNIV
                                                                                                                                                                                                                                                                                                                                                       13-MAY-1993.
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                                                              10 D 10
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                                                                                       Similarity
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                                                                                                                3 AA;
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nilarity 100.0%;
Conservative
                                                                               Conservative
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                                                                                                                                                                                                                                                                                                     SOUTHERN CALIFORNIA.
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                                                                                                                                                                                                                                                                                    Rodgers
                                                                                                                                                                                                                                                                                                                      91US-0789231.
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                                                                                       40.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 See
                                                                                                                                                                                                                                                                                    XE;
                                                                                                                                                                                                              English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                also AAR25602-29
                                                                                                                                                                                                                                                                                                                                                                                                                           surgery;
                                                                               0
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                                                                                      Score 6; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 6; DB 1; Pred. No. 7.4
                                                                                                                                                                                                                                                                                                                                                                                                                                          RGD-contg. peptide
                                                                               Mismatches
                                                                                                                                                                                                                                       partic. post-surgically -
e for a time sufficient to
                                                                                                                                                                                                                                                                                                                                                                                                                post-surgically; inhibition;
r; orthopedic; thoracic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 13; 40. 7.4e+05; 0;
                                                                                       DB 14; 1
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                                                                                              Length 3;
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14-DEC-1992
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Query Match
Best Local S
Matches 1
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N-t-butoxycarbonyl-beta-benzyl-L-aspartyl-L-prolyl-L-arginine is new cpd."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          L-Aspartyl-L-seryl-L-aspartyl-L-prolyl-L-arginine prepn. -
involves fragment-condensing tri:peptide with amino-protected
di:peptide to form penta:peptide
JP04360899-A
                                                                                                                                                Synthetic
                                                                                                                                                                                   Physiologically active; basophil; tripeptide
                                                                                                                                                                                                                       IgE-mast cell
                                                                                                                                                                                                                                                            26-MAY-1993
                                                                                                                                                                                                                                                                                                 AAR30753;
                                                                                                                                                                                                                                                                                                                                 AAR30753 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 7; Page 2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-JUN-1991;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Basophil; protective group; fragment condensing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR30728;
                                                     Modified-site
                                                                                          Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (TANA ) TANABE SEIYAKU CO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Key
Modified-site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IgE-mast cell reaction preventing peptide intermediate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-MAY-1993
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1; Conserv
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                                                                                                                                                                                                                                                        (first entry)
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                                                                                                                                                                                                                       reaction inhibitory peptide prepn.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             91JP-0159394
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                                    /note-
                                                                                                          Location/Qualifiers
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                                                                       /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note= "N-t-butoxycarbonyl-beta-benzyl-L-aspartyl"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8pp; Japanese
                                  "N(G)-nitro-L-Arg benzyl ester"
                                                                     "N-t-butoxycarbonyl-beta-benzyl-L-Asp"
                                                                                                                                                                                                                                                                                                                                     w
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 6; DB 1; Pred. No. 7.4
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 14; L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                       peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     fragment-condensing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 pentapeptide
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RESULT 10
AAR53144
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Best Local S
Matches 1
The sequences given in AAR44043-47 and AAR53144 represent examples of the claimed RGD containing peptide of the invention. These peptides all correspond to the generic formulae:

HO2-(CH2)m-C(O)-([X]-Arg-Gly-Asp-[Y])n-O-CH2CH(OR1)CH2OR2 or
R3-([X]-Arg-Gly-Asp-[Y])n-Z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Prepn. of physiologically active penta:peptide - comprises fra
condensing specified carboxyl protected tri:peptide and amino-
protected di:peptide and removing protective gps.
                                                                                                                                                                                                  05-OCT-1993.
                                                                                                                                                                                                                       JP05255105-A
                                                                                                                                                                                                                                                                                                         Key
                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                           Drug;
                                                                                                                                                                                                                                                                                                                                                                                                   02-JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The peptide is used active and prevents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim; Page 2; 8pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1993-032711/04.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-JUN-1991;
                                                                Disclosure;
                                                                                                                WPI; 1993-348360/44.
                                                                                                                                     (FUJE
                                                                                                                                                         16-MAR-1992;
                                                                                                                                                                             16-MAR-1992;
                                                                                                                                                                                                                                                     Modified-site
                                                                                                                                                                                                                                                                                                                                                 systemic lupus.
                                                                                                                                                                                                                                                                                                                                                                               RGD peptide derivative
                                                                                                                                                                                                                                                                                                                                                                                                                        AAR53144;
                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR53144 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (TANA ) TANABE SEIYAKU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-JUN-1991;
                                                                                 Immuno-control drug for organ transplant rejection etc. peptide having arginine, glycine, aspartic acid sequence
                                                                                                                                                                                                                                                                                             Modified-site
                                                                                                                                                                                                                                                                                                                                                          organ transplantation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10 D 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 D 1
                                                                                                                                      FUJI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                              Page 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                    PHOTO FILM CO
                                                                                                                                                                                                                                                                                                                                                                                                  (first
                                                                                                                                                          92JP-0058460
                                                                                                                                                                             92JP-0058460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        91JP-0159492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             91JP-0159492
                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                          /note-
                                                                                                                                                                                                                                                                                    /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  in the prepn. (claimed) of a physiologically the IgE - mast cell (basophil) reaction.
                                                            11pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                40.0%;
                                                                                                                                                                                                                                                             *C9H19C0-Arg, C13H27C0-Arg, C15H31C0-Arg, CH3-[(CH(CH3)-(CH2)3]3-CH(CH3)-CH2-CO-Arg CH3-[(CH(CH3)-(CH2)3]2-CH(CH3)-CH2-CO-Arg*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ဗ
                                                                                                                                                                                                                                          "Asp-OH or Asp-NH2"
                                                                                                                                     GE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 6; DB 1; Pred. No. 7.4
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                          rejection;
                                                                                                                                                                                                                                                                                                                                                                                                                                          ₿
                                                                                                                                                                                                                                                                                                                                                          immune disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .4e+05;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          comprises fragment-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                            contains
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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RESULT 12 AAR48960 ID AAR48 XX

AAR48960 standard;

Protein;

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ID AAR4
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                                                                              Query Match
Best Local Similarity
Watches 1; Conserva
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                                                                                                                                                                                       RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        [X], [Y] = amino.
m = 1-5;
n = 15;
R1, R2 = H or 8-2
R3 = 6-24C acyl;
Z = hydroxyl or a
                                                                                                                                                                                                                        A peptide complex contg. peptide 5 as guest mol. is useful as platelet aggregation or adhesion inhibitor. It is hardly hydiby protease in vivo and thus maintains its effect for a long perfect for a long 
                                                                                                                                                                                                                                                                                                                                                Complex of adhesion peptide in host molecule e.g. beta-cyclodextrin - useful as platelet aggregation which is resistant to protease degradation in-vivo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     These peptides form the active part of drugs which are used for control of organ transplantation rejection or immune disorders s
                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                          Disclosure; Page 4; 5pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1994-173759/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-OCT-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-OCT-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-APR-1994.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JP06116289-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Platelet aggregation; adhesi beta-cyclodextrin; protease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Platelet aggregation or adhesion inhibitor -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-JAN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAR44666 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                as systemic lupus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (FUJF ) FUJI PHOTO FILM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                             10 D 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10 D 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3 D 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity 100
1; Conservative
                 U
                   w
                                                                                                                                                                                     3 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      or 8-24C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     amino acid or
                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                c amino.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   92JP-0271294.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            92JP-0271294
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%;
                                                                                                                   100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          adhesion;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ဗ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   peptide residues;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      or alkyl;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LTD.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3
AA
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0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                     Score 6;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             inhibitor;
                                                                                                    Mismatches
                                                                                                                          .
7.88
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .4e+05;
s 0;
                                                                                                    .4e+05;
s 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          guest;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 3;
                                                                                                                                       Length 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        host;
                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                          inhibitor
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hydrolysed
ong period.
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                                                                                                  Gaps
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RESULT 13
AAR82907
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                                                                                                                                                                                                                                                                             Query Match
Best Local S
Matches 1
                                                                                                                                                                                                                                                                                                                                                                                                    bind to the mRNAs expressed by the naturally occurring viruses (NOVs) and prevent the mRNAs from being translated into proteins, thereby preventing the NOV from replicating. The antisense viruses maintain
                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                         C-terminal peptide fragment of the truncated GAG protein. The DNA encoding this fragment was ligated into Clar/Sall digested pX and the corresponding plasmid was used to produce the antisense virus of the invention. Antisense or truncated RNAs expressed by these viruses
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New antisense viruses and anti:sense-ribozyme viruses - treating or preventing viral infections, partic. HIV-1, SIV infection
JP07089999-A.
                                                                                                                                       AAR82907;
                                                                                                                                                              AAR82907 standard; peptide; 3
                                                                                                                                                                                                                                                                                                                                                    preventing the NOV from replicating. The antisense viruses maintain the infectivity of the NOVs, allowing antisense RNAs to reach the mRNAs of the natural viruses. Antisense viruses such as these may be used for treating or preventing a viral infection, particularly HIV-1, HIV-2 or SIV infection or hepatitis B infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1994-065685/08
N-PSDB; AAQ57688.
                                                         Cancer metastasis; adhesive peptide; core sequence; dextran; cancer;
                                                                                     Non-RGD,
                                                                                                              20-DEC-1995
                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This sequence is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 108; 167pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hu W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JUL-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-JUL-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-FEB-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 W09403596-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HIV-1; HXB2; antisense; sequence inversion; naturally occurring virus; NOV; translation; hepatitis B; HIV-2; SIV; flip-over PCR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAR48960;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (UYHA-) UNIV HAWAII.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NL4-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12-SEP-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  truncated GAG C-terminal
                                                soluble
                                                                                                                                                                                                                                                     10
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                                                                                                                                                                                                                                                                             Similarity
1; Conserv
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2
                                                                                                                                                                                                                                                     D 10
                                                                                     non-YISGR
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                                                                                                                                                                                                                                                                              Conservative
                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                               polysaccharide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92US-0921104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             93WO-US07179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              encoded by
                                                                                  cancer metastasis inhibitory
                                                                                                                                                                                                                                                                        40.0%; 50
100.0%; Pr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a PCR fragment of NL4-3 and represents the
                                                                                                                                                                                                                                                                                       Score 6;
Pred. No.
                                                                                                                                                                3
                                               metastasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               peptide
                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                         DB 15; L
                                               wound;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antisense virus; infection;
replication; infectivity;
                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                     Length 3;
                                                                                  peptide
                                             immunogenicity.
                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          used for
HIV-2 or
                                                                                     #1
                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                            Gaps
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RESULT 14
AAR70472
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Best Local Similarity
Matches 1; Conserv
                                                                                                                                                                                              Cancer metastasis inhibitive peptide derivs. - useful for inhibition of cancer metastasis, healing of wounds and regulation of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cancer metastasis; adhesive peptide; core sequence; dextran;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAR70472 standard; peptide;
                                                                                                                      Disclosure; Page 2;
                                                                                                                                                                                                                                                                         WPI;
                                                                                                                                                                                                                                                                                                                       (JAPG ) NIPPON ZEON KK.
                                                                                                                                                                                                                                                                                                                                                                           17-SEP-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                         17-SEP-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-APR-1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JP07089999-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-DEC-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAR70472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              polysaccharide, preferably a water soluble dextran, at the C-terminus. The peptides are useful in inhibiting cancer metastasis, healing wounds and the regulation of immunogenicity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Page 3; 6pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cancer metastasis inhibitive peptide derivs of cancer metastasis, healing of wounds and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1995-167254/22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-APR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       water soluble
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The peptides AAR70472-90 and AAR82907-24 are peptide derivatives which inhibit cancer metastasis. They are composed of an adhesive peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-SEP-1993;
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                                                                                                                                                                       immunogenicity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (JAPG ) NIPPON ZEON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              inhibit cancer metastasis. They are composed of an adi
with a core sequence selected from: RGD (AAR70472-85),
(AAR70486-90) or other sequence (AAR82907-24), linked t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          immunogenicity.
                                                                                                                                                                                                                                                                         1995-167254/22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  metastasis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       D 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           U
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      40.0%; Solitarity 100.0%; If arity 100.0%; If a conservative is a 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       polysaccharide;
                                                                                                                                                                                                                                                                                                                                                                           93JP-0254779
                                                                                                                                                                                                                                                                                                                                                                                                                         93JP-0254779
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             inhibitory peptide
                                                                                                                   6pp;
                                                                                                                   Japanese.
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Pred. No.
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. 7.4e+
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       wound; immunogenicity.
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The peptides AAR70472-90 and AAR82907-24 are peptide derivatives which inhibit cancer metastasis. They are composed of an adhesive peptide with a core sequence selected from: RGD (AAR70472-85), YIGSR (AAR70486-90) or other sequence (AAR82907-24), linked to a water soluble

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RESULT 15
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AAR64556-589 are peptide derivatives of a 37 mer RF-1 peptide derived from respiratory syncitial virus (RS) (AAR64590) which have been truncated at the carboxy terminus. The peptides are DP-178 like peptides. DP-178 corresponds to amino acids 638 to 673 of the HIV-1 isolate LAI transmembrane protein gp41. It forms a putative alpha helix at the C-terminal end of the gp41 ectodomain, and complexes with DP-107 (corresponds to amino acids 558-595) which contains a leucine zipper motif. The peptides complex via non-covalent protein interactions. The peptide derivatives were identified by a computer assisted peptide sequence search. The antiviral activity of this peptide is not stated in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antiviral activity; DP-178; DP-107; diagnostic; HIV-1LAI;
human immunodeficiency virus; transmembrane protein; gp41;
alpha helix; leucine zipper; DP-185; respiratory syncitial virus;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR64556 standard; Peptide; 3 AA.
                                                                                                                                                                                                                                                                                         Claim 14; Page 137; 182pp; English.
                                                                                                                                                                                                                                                                                                                                           Computer search generated synthetic peptides - {\bf HIV} transmission
                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1995-036105/05.
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Petteway SR,
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or macromolecular carrier
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Pred. No. 7.4e+05;
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Search completed: June 5, 2003, 16:00:25 Job time: 35.9394 secs
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o. 7.4e+05;
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23, Appl 33, Appl 39, Appl 23, Appl 23, Appl 35, Appl 35, Appl 35, Appl 23, Appl 23, Appl 23, Appl 39, Appl 39, Appl 39, Appl 30, Appl 31, Appl

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Total number of hits satisfying chosen parameters:
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s derived by analysis of the total score distribution.
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/cgn2_6/ptodata/1/1aa/5B_COMB.pep:*
/cgn2_6/ptodata/1/1aa/6A_COMB.pep:*
/cgn2_6/ptodata/1/1aa/6B_COMB.pep:*
/cgn2_6/ptodata/1/1aa/FCTUS_COMB.pep:*
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US-07-820-154A-3
US-07-820-154A-3
US-07-820-154A-3
US-07-820-154A-3
US-07-820-154A-3
US-08-153-799-20
US-08-097-554A-3
US-08-097-554A-3
US-08-097-554A-3
US-08-539-432-15
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US-08-539-432-15
US-08-480-640A-12
US-08-480-640A-2
US-08-480-640A-3
US-08-480-640A-3
US-08-295-802-15
US-08-480-640A-3
US-08-295-802-3
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15, Appl
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1
                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION:
TELEPHONE: (212)977-9550
TELEFAX: (212)64-0525
TELEX: 422523
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 2 amino acids
TYPE: AMINO ACID
TOPOLOGY: Linear
MOLECULE TYPE: protein
US-07-820-154A-15
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US-07-820-154A-15
    RESULT 2
US-07-820-154A-23
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GENERAL INFORMATION:
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Best Local Similarity
Matches 1; Conserv
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/820,154A
FILING DATE: 19920113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Cochran Ph.D., Mark D
APPLICANT: Junker M.S., David E
TITLE OF INVENTION: Recombinant Swinepox Virus
NUMBER OF SEQUENCES: 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTORNEY/AGENT INFORMATION:
NAME: White, John P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 424
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STATE: New York
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30 Rockefeller Plaza
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US-08-375-992A-33
US-08-375-992A-39
US-08-375-992B-39
US-09-295-996B-35
US-09-295-996B-35
US-09-295-996B-35
US-09-295-996B-35
US-09-295-996B-35
US-09-295-996B-35
US-09-295-996B-35
US-09-295-996B-35
PCT-US93-00324-33
PCT-US93-00324-33
PCT-US93-00324-39
US-07-748-943-2
US-08-08-159-524-6
US-08-08-551-027-1
US-08-251-027-2
US-08-251-027-3
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Result No.

Score

Query Match

Length

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Minimum Maximum

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length:

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Searched:

Scoring table:

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Title: Perfect score:

US-09-150-947F-15

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Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 s

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RESULT 3
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                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PATEM: PC-DOS/MS-DOS
SOFTWARE: PATEMIT Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/820,154A
FILING DATE: 1920113
ATTORNEY/AGENT INFORMATION:
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LENGTH: 2 amino acids
TYPE: AMINO ACID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME: White, John P
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212)977-9550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 19920113
                                                                                                                                                                                                                                                                                            APPLICANT: Cochran Ph.D., Mark D
APPLICANT: Junker M.S., David E
TITLE OF INVENTION: Recombinant Swinepox Virus
NUMBER OF SEQUENCES: 40
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APPLICANT: Junker M.S., David E
TITLE OF INVENTION: Recombinant Swinepox Virus
NUMBER OF SEQUENCES: 40
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MEDIUM TYPE: Floppy disk
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ADDRESSEE: John P. White
                     FILING DATE: 199 CLASSIFICATION:
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OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
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STATE: New York
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o. 5382425
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o. 5382425
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                                                           Matches
                                                                       Query Match
Best Local Similarity
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Best Local Similarity
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                                                                                                                                                                                                            TELEX: 422523 INFORMATION FOR SEQ ID NO:
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INFORMATION FOR SEQ ID NO:
                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 2 amino acids
                                                                                                                                                                                                                                                    CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: White, John P
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212)977-9550
                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
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LENGTH: 2 amino acids
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Cochran Ph.D., Mark D
                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC
OPERATING SYSTEM:
SOFTWARE: Patenti
                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: UPFILING DATE: 19920113
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                                                                                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE:
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TELEFAX: (212)664-0525
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5. 5382425
                            10 D 10
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AMINO ACID
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New York
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                                                         Conservative
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IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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                                                        40.0%; Score 6; DB
100.0%; Pred. No. 1.
Live 0; Mismatches
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100.0%; Pred. N
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RESULT 5 US-08-358-160-171

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; Sequence 171, Application US/08358160 ; Patent No. 5663143

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RESULT 6
US-08-153-799-20
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             Sequence 20, Application US/08153799 Patent No. 5766883 GENERAL INFORMATION:
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CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/133,031
APPLICATION TATE: 13-OCT-1993
                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
LENGTH: 2 amino acids
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MEDIUM TYPE: Floppy disk
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REFERENCE/DOCKET NUMBER: LE
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-628-5197
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APPLICANT:
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                                                                                                                                                                                                                                                                                                        TYPE: amino acid
STRANDEDNESS: si
                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: 202-737-3528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 07/487,063 FILING DATE: 02-MAR-1990
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                                                                                                                                                                                                            Local
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Ballance, David J
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                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                       linear
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                                                                                                                                                                                                         Sequence 15, Application US/08097554A Patent No. 5869312
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Best Local S
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE/DOCKET NUMBER: 92
TELECOMMUNICATION INFORMATION:
TELEPHONE: (908) 665 2400
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APPLICATION NUMBER: US 07
FILING DATE: 06-MAR-1992
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/153,799
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TITLE OF INVENTION: Polypep
COMPUTER READABLE FORM:
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                                                                                                            CORRESPONDENCE ADDRESS:
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OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                            TLE OF INVENTION:
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                              COUNTRY:
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                                                                                             John P.
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29-OCT-1991
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Recombinant Swinepox Virus
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                                                                             Plaza
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0; Mismatches
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DB 1; No. 1.9e+05; 0;

Length 2; Indels

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                                                                 ; TOPOLOGY: linear; MOLECULE TYPE: protein US-08-097-554A-23
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US-08-097-554A-23
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         Matches
                                     Query Match
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                                                                                                                                         SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
NAME: White, John P
                                                                                                                                                                                                      TELECOMMUNICATION INFORMATION: TELEPHONE: (212)977-9550
                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: linear MOLECULE TYPE: protein
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APPLICANT: Junker M.S., David E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION:
    / Match 40.0%; Score 6; DB Local Similarity 100.0%; Pred. No. 1. tes 1; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                        OPERATING SYSTEM:
SOFTWARE: PatentT
                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/08/097,554A FILING DATE: July 22, 1993 CLASSIFICATION: 435
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                                                                                                                            LENGTH:
                                                                                                                                                                                                                                                                                                                                                                     MEDIUM TYPE:
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                                                                                                             amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                               New York
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                                                                                                                           2 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                  USA
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                                                                                                                                                                                      (212)664-0525
                                                                                                                                                                                                                                                                                                                         PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                      E: Floppy disk
IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             John P. White
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YSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Recombinant Swinepox Virus
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DB 2; Le
5. 1.9e+05;
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US-08-097-554A-39
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US-08-097-554A-33
                                                                                                                                                                                                                                       Sequence 39, Application US/08097554A Patent No. 5869312
                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEX: 422523
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 2 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 33,
                                                                                                                                                                                                                         GENERAL INFORMATION:
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                        NUMBER OF SEQUENCES: 1
                                                                                                                                                                                APPLICANT: Cochran Ph.D., Mark L
APPLICANT: Junker M.S., David E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: 1:
MOLECULE TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: White, John P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION: TELEPHONE: (212)977-9550
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Cochran Ph.D., Mark D
APPLICANT: Junker M.S., David E
TITLE OF INVENTION: Recombinant Swinepox Virus
NUMBER OF SEQUENCES: 112
                                                                                                                                                                        TITLE OF INVENTION:
                                                                             STREET: 30 Rock
CITY: New York
STATE: New York
                                                              COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity les 1; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/08/
FILING DATE: July 22, 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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    Application US/08097554A
5869312

                                                                                                             30 Rockefeller Plaza
                                                                 USA
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30 Rockefeller Plaza
                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (212)664-0525
                                                                                                                                                                                                         Cochran Ph.D., Mark D
                                                                                                                             John P. White
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Query Match
Best Local Similarity
Tatches 1; Conserve
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US-08-539-432-15
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Best Local Similarity
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                                                                                                                                                            TELEFAX: (212) 751-6849
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: White, John P
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212)977-9550
                                                                                                                                                                                       REGISTRATION NUMBER: 36,434
REFERENCE/DOCKET NUMBER: 20
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 758-4800
                                                                                                                                               SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                               CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                        SOFTWARE: ASCII
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: FLOPPY DISK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      UMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                       OPERATING SYSTEM:
SOFTWARE: ASCII
                                                                                                     TYPE: Amino Acid
'STRANDEDNESS: Unl
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                                                                                                                                                                                                                                                                                                                                                                                                                                              CITY: NEW YORK
STATE: NEW YORK
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                                                                                       TOPOLOGY:
                                                                                                                                LENGTH:
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                                                                                                                                                                                                                                                    DOROTHY R. AUTH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 amino acids
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            40.0%; Score 6; DB; ilarity 100.0%; Pred. No. 1.9 Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDABALIMI, JOHN L.
FENTION: TRANSFRAME INHIBITORY
FENTION: ELEMENT OF VIRAL
FENTION: PROTEASE
                                                                                       Linear
                                                                                                                                                                                                                                                                                                                                                        IBM PC COMPATIBLE SYSTEM: PC-DOS/MS-DOS
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                                                                                                     Unknown
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n Release #1.0, Version #1.25
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Pred. No.
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                           DB 2; Length 2;
5. 1.9e+05;
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5. 1.9e+05;
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Patent No.
                                                                                                                                                                                                        Patent No.
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                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
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                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELEFAX: (212) 751-6849
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: DOROTHY R. AUTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER READABLE FORM: MEDIUM TYPE: FLOPPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE CHARACTERISTICS:
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CORRESPONDENCE ADDRESS:
                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                  NUMBER OF SEQUENCES:
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SOFTWARE: ASCII
                                         CITY: NEW YORK
STATE: NEW YORK
                                                                      STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS:
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                             COUNTRY:
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                                                                                    ADDRESSEE:
                                                                                                                                                                                                          17, Application US/08539432
o. 5872210
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o. 5872210
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                                                                      345 PARK AVENUE
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                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IBM PC COMPATIBLE
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                Linear
                                                                                    MORGAN & FINNEGAN, L.L.P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                              Unknown
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                                                                                                                                TRANSFRAME INHIBITORY ELEMENT OF VIRAL PROTEASE
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                                                                                                                                                                         JOHN L.
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Length 2; 0; Indels

0,

Gaps

COMPUTER READABLE FORM: MEDIUM TYPE: FLOPPY

OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: ASCII

: FLOPPY DISK
IBM PC COMPATIBLE

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RESULT 15
US-08-480-640A-15
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US-09-327-424-2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TOPOLOGY: Linear
US-08-539-432-17
                                                                                 Sequence 15, Application US/08480640A Patent No. 6033904 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 2
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Best Local s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Eyre, David R
TITLE OF INVENTION: KIT FOR DETECTING ANALYTE INDICATIVE OF TYPE I COLLAGEN
TITLE OF INVENTION: RESORPTION IN VIVO (as amended)
FILE REFERENCE: WROS-1-14019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/
CURRENT FILING DATE: 1999-06-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: (212) 758-4800
TELEFAX: (212) 751-6849
INFORMATION FOR SEQ ID NO: 17:
                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Human FEATURE:
                                                                                                                                                                                                                                                                                                                                                          OTHER INFORMATION: N-telopeptide sequence of type II collagen
APPLICANT: Cochran, Mark D.
APPLICANT: Junker, David E.
TITLE OF INVENTION: Recombinant Swinepox Virus
NUMBER OF SEQUENCES: 225
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                               ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 36,434
REFERENCE/DOCKET NUMBER: 20
TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US/08/539,432 FILING DATE: 05-OCT-1995 CLASSIFICATION: 514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: Amino Acid
STRANDEDNESS: Un)
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                                                                                                                                                                                                                                                                          Conservative
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Best Local Similarity
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Search completed: June 5, 2003, 15:32:43 Job time: 8.78788 secs
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                                                                                                                                                                                                                                                                                         ATTORNEY_AGENT INFORMATION:

NAME: White, John P

REGISTRATION NUMBER: 28,678

TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 278-0400

TELEFAX: (212) 391-0525
                                                                                                                                                                                                                                                                              TELEFAX: (212) 391-05
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08
FILING DATE: 07-JUN-1995
CLASSIFICATION: 424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDIUM TYPE: Floppy
                                                                                                                                                                                                  TOPOLOGY: 11
                                                                                                                                                                                                                                                                SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER: IBM PC
OPERATING SYSTEM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: John P. White
STREET: 1185 Avenue of the Americas
CITY: New York
STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COUNTRY:
                                                                                                                                                                                                                               TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE:
                                                                                                                                                                                                                                                LENGTH:
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SYSTEM: PC-DOS/MS-DOS
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                                                                                                                       40.0%; Score 6; DB
100.0%; Pred. No. 1.
tive 0; Mismatches
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Maximum Match 100%
Listing first 45 summaries
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Maximum DB seq length: 2000000000
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Gapop 10.0 , Gapext 0.5
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    /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
    /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*
    /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*
    /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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US-10-015-979-58 US-10-226-956-316 US-10-226-956-317 US-10-226-956-318 US-10-226-956-319 US-10-226-956-319 US-10-237-850-81 US-10-237-850-81 US-10-237-850-81 US-10-281-652-11	US-10-187-339-6 US-10-206:699-296 US-09-982-172-8 US-09-982-172-105 US-09-900-936-11 US-09-840-277-31 US-09-840-277-31 US-09-747-408-21 US-10-014-162-37 US-10-039-876A-3 US-10-039-876A-3	ID .
Sequence 58, Appl Sequence 316, App Sequence 317, App Sequence 319, App Sequence 319, App Sequence 1, Appli Sequence 6, Appli Sequence 1, Appli Sequence 11, Appli	Sequence 6, Appli Sequence 296, App Sequence 8, Appli Sequence 105, Appl Sequence 11, Appl Sequence 31, Appl Sequence 37, Appl Sequence 37, Appli Sequence 3, Appli Sequence 4, Appli	Description

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Sequence 35, Appl Sequence 2, Appl1 Sequence 7, Appl1 Sequence 8, Appl1 Sequence 16, Appl	5,112 5,114 6,115 6,116	19, 20, e 113 e 9, e 19, e 11,	Sequence 13, Appl Sequence 19, Appl Sequence 15, Appl Sequence 16, Appl Sequence 17, Appl Sequence 18, Appl

ALIGNMENTS

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RESULT 4
US-09-982-172-105
; Sequence 105, Application US/09982172
; Patent No. US20020137119A1
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US-09-982-172-8
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US-10-206-699-296
CURRENT APPLICATION NUMBER: US/09/982,172
CURRENT FILING DATE: 2001-10-19
NUMBER OF SEQ ID NOS: 253
SOFTWARE: PatentIn version 3.1
SEQ ID NO 105
LENGTH: 2
                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Emil Israel Katz
                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 40.9
Best Local Similarity 100
Matches 1; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ ID NO 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Emil Isr
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: PEPTIDES REPRESENTATIVE OF POLYPEPTIDES OF INTITLE OF INVENTION: DIRECTED THÉREAGAINST, AND METHODS, SYSTEMS TITLE OF INVENTION: UTILIZING EACH
                                                                                                                    FILE REFERENCE: 01/22283
                                                                                                                                    TITLE OF INVENTION: PEPTIDES REPRESENTATIVE OF POLYPEPTIDES OF INTEREST AND ANTIBODITITLE OF INVENTION: DIRECTED THEREAGAINST, AND METHODS, SYSTEMS AND KITS FOR GENERALIZED OF INVENTION: UTILIZING EACH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 253
SOFTWARE: Patentin version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: 01/22283
CURRENT APPLICATION NUMBER: US/09/982,172
CURRENT FILING DATE: 2001-10-19
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PRIOR FILING DATE: 2001-10-29
PRIOR FILING DATE: 2001-03-60/366,854
PRIOR FILING DATE: 2002-03-22
PRIOR APPLICATION NUMBER: US 60/385,362
PRIOR FILING DATE: 2002-06-03
PRIOR FILING DATE: 2002-06-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT FILING DATE: 2002-07-26
PRIOR APPLICATION NUMBER: US 60/308,523
PRIOR FILING DATE: 2001-07-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Artificial sequence
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1; Conserv
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ilarity 100.0%;
Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%;
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b; Pred. No. 3.3
0; Mismatches
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RESULT 6
US-09-840-277-31
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; OTHER INFORMATION: Computer generated synthetic peptide
US-09-982-172-105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Description of Artificial Sequence: AII US-09-900-936-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
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US-09-900-936-11
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Best Local Similarity .100
Matches 1; Conservative
                                                                                   SOFTWARE: PatentIn version 3.1 SEQ ID NO 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 11
                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                               Patent No. US20020168363A1
                                                                                                                                                                                                                                                                                                                                                                               Sequence 31,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: Methods for Promoting Dendritic Cell Proliferation TITLE OF INVENTION: or Differentiation FILE REFERENCE: 00-506-A CURRENT APPLICATION NUMBER: US/09/900,936 CURRENT FILING DATE: 2001-07-09
                                                                                                                                                                      CURRENT FILING DATE: 2001-08-14
PRIOR APPLICATION NUMBER: 60/198,919
PRIOR FILING DATE: 2000-04-21
                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/09/840,277
CURRENT FILING DATE: 2001-08-14
                                                                                                                       NUMBER OF SEQ ID NOS: 135
                                                                                                                                     PRIOR APPLICATION NUMBER: 60/201,394 PRIOR FILING DATE: 2000-05-03
                                                                                                                                                                                                                                           FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT FILING DATE: 200 NUMBER OF SEQ ID NOS: 50
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                                                                                                                                                                                                                                                                                                               APPLICANT:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Rodgers, Kathleen
                                                                                                                                                                                                                                                           FITLE OF INVENTION: INTEGRIN/ADHESION ANTAGONISTS
                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 3
TYPE: PRT
ORGANISM: Artificial Sequence
                                ORGANISM: Artificial Sequence
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ORGANISM: Artificial sequence
OTHER INFORMATION: Integrin antagonist peptide
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                                                                  LENGTH:
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                                                                                                                                                                                                                                                                           LACEY, DAVID LEE
BOONE, THOMAS CHARLES
                                                                                                                                                                                                                                                                                                                                                                                 Application US/09840277
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S20020165141A1
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; ORGANISM: Bos taurus
US-10-014-162-37
RESULT 9
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NUMBER OF SEQ ID NOS: 112
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 37
LENGTH: 3
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Best Local Similarity
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TITLE OF INVENTION: Compounds And Methods For Modulating
TITLE OF INVENTION: Cerebral Amyloid Angiopathy
FILE REFERENCE: MBI-088
CURRENT APPLICATION NUMBER: US/09/747,408
CURRENT FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/171,877
PRIOR APPLICATION NUMBER: 60/171,877
PRIOR FILING DATE: 1999-12-23
NUMBER OF SEQ ID NOS: 24
                                                                                                                                                                                                                                                                                                     APPLICANT: USdin, Ted B.
APPLICANT: Hoare, Samuel R.J.
APPLICANT: Hoare, Samuel R.J.
TITLE OF INVENTION: PARATHYROID HORMONE RECEPTOR LIGANDS
FILE REFERENCE: NIH175.001C1
CURRENT APPLICATION NUMBER: US/10/014,162
CURRENT FILING DATE: 2001-12-11
PRIOR APPLICATION NUMBER: PCT/US00/1677
PRIOR APPLICATION NUMBER: PCT/US00/1677
PRIOR APPLICATION NUMBER: 00/139335
PRIOR APPLICATION NUMBER: 60/139335
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Best Local S
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Best Local :
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                                                                   Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/10/039,876A
CURRENT FILING DATE: 2001-10-26
PRIOR APPLICATION NUMBER: US 60/061,712
PRIOR FILING DATE: 1997-10-06
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APPLICANT: Blumberg, Hal
TITLE OF INVENTION: A HUMAN 2-19 PROTEIN HOMOLOGUE, Z219A
FILE REFERENCE: 97-63C1
                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: A HUMAN 2-19 PROTEIN HOMOLOGUE, FILE REFERENCE: 97-63C1
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TYPE: PRT
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                                                                                                                                                        OTHER INFORMATION: Motif 2, corresponding to residues 156 OTHER INFORMATION: SEQ ID NO:2
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RESULT 11
US-10-015-979-58
; Sequence 58, Application US/10015979
; Publication No. US20030036050A1

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RESULT 13
US-10-226-956-317
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                                                                                                                                                                                                  ; OTHER INFORMATION: Synthetic peptide US-10-226-956-316
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US-10-226-956-316
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; LOCATION: (1)..(3)
; OTHER INFORMATION:
US-10-015-979-58
                                                                                                                               Query Match
Best Local Similarity
Matches 1; Conserv
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SOFTWARE: PatentIn version
SEQ ID NO 316
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Brophy, Colleen APPLICANT: Komalavilas, P. APPLICANT: Panitch, Alyss
                                                                                                                                                                                                                                                                                                                                                CURRENT FILING DATE: 2002-08-23
PRIOR APPLICATION NUMBER: 60/314,535
PRIOR FILING DATE: 2001-08-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/015,979
CURRENT FILING DATE: 2001-12-10
PRIOR APPLICATION NUMBER: PCT/NL00/00399
PRIOR FILING DATE: 2000-06-09
PRIOR APPLICATION NUMBER: 60/138,443
PRIOR FILING DATE: 1999-06-10
                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/10/226,956
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TITLE OF INVENTION: Enzyme Selection
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ORGANISM: Artificial sequence
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ORGANISM: Artificial Sequence
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T: Verhaert, Raymond
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100.0%; Pr
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RESULT 15
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Sequence 319, Application US/10226956 Publication No. US20030060399A1
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SOFTWARE: PatentIn version 3.1
SEQ ID NO 318
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                                                                                                                                                                        Matches
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CURRENT FILING DATE: 2002-08-23
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CURRENT FILING DATE: 2002-08-23
PRIOR APPLICATION NUMBER: 60/314,535
PRIOR FILING DATE: 2001-08-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILE REFERENCE: ASU-1061-US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: REAGENTS AND METHODS FOR SMOOTH MUSCLE THERAPIES
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APPLICANT: Brophy, Colleen
APPLICANT: Komalavilas, Padmini
APPLICANT: Monalavilas, Padmini
APPLICANT: Joshi, Lokesh
APPLICANT: Seal, Brandon L.
APPLICANT: Seal, Brandon L.
ITILE OF INVESTION: REAGENTS AND METHODS FOR SMOOTH MUSCLE THERAPIES
FILE REFERENCE: ASU-1061-US
CURRENT PILING DATE: 2002-08-23
PRIOR APPLICATION NUMBER: US/10/226,956
CURRENT FILING DATE: 2001-08-23
PRIOR APPLICATION NUMBER: 60/314,535
PRIOR APPLICATION NUMBER: 60/314,535
PRIOR FILLING DATE: 2001-08-23
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PRIOR FILLING DATE: 2001-08-23
VALUE : PATOTRE: OF THE PATOTRICANT NUMBER: 60/314,535
VALUE : PATOTRE: OTHER INFORMATION: Synthetic peptide
US-10-226-956-319

Query Match
Best Local Similarity 100.0%; Pred. No. 3.3e+05;
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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metallothionein-A - rainbow trout (fragment)
C;Species: Oncorhynchus mykiss (rainbow trout)
C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996
C;Accession: I51049
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A;Contents: annotation; X-ray crystallography,
A;Note: achatin-II has L-phenylalanine
C;Keywords: D-amino acid
E;2/Modified site: D-phenylalanine (Phe) #stari
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A;Title: Structural and functional analysis
A;Reference number: I51049; MUID:95324545; F
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J. Bacteriol. 173, 7449-7457, 1991
A;Title: Copper-zinc superoxide dismutase of Haemophilus A;Reference number: A41654; MUID:92041655; PMID:1938942
A;Accession: D41654
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                                                                                              A; Status: preliminary;
                                                                                                                                                                                                R;Olsson, P.E.; Kling, P.;
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A;Title: Achatin-I, an endogenous neuroexcitatory tetrapeptide from Achatina fulica feru A;Reference number: A32480; MUID:89273551; PMID:2597281
A;Accession: A32480
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A;Title: Effect of the D-Phe(2) residue on
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Date: 12-Oct-1989 #sequence_revision 12-Oct-1989 #text_change 17-Mar-1999
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                                                                                                                                                                                                                RESULT 8
PT0696
                                                                                                                          C:Species: Mus musculus (house mouse)
C:Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 30-May-1997
C:Accession: PT0635; PT0612; PT0545; PT0692; PT0552; PT0696
                                    A; Reference number: A; Accession: PT0635
                                                     A; Title: Junctional sequences of A; Reference number: PT0509; MUID:
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                                                                                                              R; Feeney,
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                                                                                              Exp. Med. 174, 115-124, 1991
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translation

fetal T cell receptor beta: 91277601; PMID:1711558

chains have

few N regions

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T-cell receptor beta 2 chain D region, Dbeta2 - rabbit C;Species: Oryctolagus cuniculus (domestic rabbit) C;Date: 02-May-1994 #sequence_revision 18-Nov-1994 #te:
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A; Residues: 1-4 <YAM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    R;Yamada, M.; Wasserman, R.; Reichard, B.A.; 9
J. Exp. Med. 173, 395-407, 1991
A;Title: Preferential utilization of specific
A;Reference number: PT0222; MUID:91108337; PMIA;Accession: PT0271
                                                                                                                        A;Cross-references: GB:S60737; NID:g233916; PIDN:AAB19518.1; PID:g233918 A;Note: sequence extracted from NCBI backbone (NCBIN:60737, NCBIP:60738) C;Keywords: T-cell receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C; Date: 30-Sep-1993
C; Accession: PT0271
                                                                                                                                                                                                                      A; Reference number: A53284; A; Accession: B53284
                                                                                                                                                                                                                                                                                  R; Harindranath,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C; Keywords: heterotetramer;
                                                                                                                                                                                                                                                  A; Title: Evolutionarily
                                                                                                                                                                                                                                                                     Mol. Immunol. 28, 881-888,
                                                                                                                                                                                                                                                                                                      C; Accession:
                                                                                                                                                                        A; Residues: 1-4 <HAR>
                                                                                                                                                                                       A; Molecule type: DNA
                                                                                                                                                                                                      A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Experimental source: B lymphocyte
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                                                             Matches
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Best Local
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                                                           40.0%; ilarity 100.0%; Conservative
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                                                                            Score 6;
Pred. No.
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A;Status: translation not shown A;Molecule type: mRNA A;Residues: 1-4 <FE4>A;Experimental source: day 19 f
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C;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 30-May-1997
C;Accession: PT0607; PT0674; PT0678; PT0570; PT0711; PT0710
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                                                                                                                                   A; Experimental source: A; Accession: PT0570
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A; Residues: 1-4 <FE1>
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A; Experimental sour
A; Accession: PT0612
                                                             A; Accession: PT0711
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A; Residues: 1-4 <FE2>
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A; Accession: PT0607
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                                 Molecule type:
                                                                                                                                                                  Molecule type: DNA Residues: 1-4 <FE3>
                                                                                                                                                                                                           Accession: PT0678
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Best Local :
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100.0%; Pr
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                                                                                                                                                  18 fetal
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 thymus,
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C:Accession: A26209
C:Accession: A26209
R;Connellan, J.M.; Chung, S.I.; Whetzel, N.K.; Bradley, L.M.;
R;Connellan, J.M.; Chung, S.I.; Whetzel, N.K.; Bradley, L.M.;
R;Connellan, J.M.; Chung, S.I.; Whetzel, N.K.; Bradley, L.M.;
Riol. Chem. 246, 1093-1098, 1971
                               R;HS1,
                                                            spinal cord peptide SCP-6 - pig
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 28-Sep-1987 #sequence_revision 28-Sep-1987 #text_change 18-Aug-2000
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F; 5/Modified site:
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                                 C; Accession: C23751
R; Hsi, K.L.; Chen,
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A; Residues: 1-5 <SHI>
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Am. J. Physiol. 252, G272-G275, 1987
A;Title: CCK-5: sequence analysis of a small cholecystokinin
A;Reference number: A32516; MUID:87153871; PMID:3826354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C; Species: Canis lupus familiaris (dog)
C; Date: 18-Oct-1989 #sequence_revision
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C; Keywords: aminoacyltransferase
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Title: Structural properties of guinea pig liver transglutaminase. A; Reference number: A26209; MUID:71111415; PMID:5543674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         protein-glutamine gamma-glutamyltransferase (EC C;Species: Cavia porcellus (guinea pig) C;Date: 10-Sep-1987 #sequence_revision 10-Sep-1987
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     A; Reference number:
                                                                                                                                                                                                                                                                                                                                                                                                          A; Accession: A32516
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A; Residues: 1-4 <CON>
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Best Local
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   Biophys. 240,
ber: A23751;
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R.L.; Chen, Z.G.; Zhang
phys. 240, 178-183, 1985
:: A23751; MUID:85250425;
                                                                                                                                                                                                                                                          100.0%;
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Pred. No.
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yl end (Phe)
                    Zhang, H.L.;
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   PMID:4015098
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                               Lu, Y.A.;
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                                 S.Y.; Wu, S.X.;
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A;Accession: C23751 A;Status: preliminary A;Molecule type: protein A;Residues: 1-5 <HSI> C;Superfamily: unassigned animal peptides

2;

Length 5;

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RESULT 15
B31836
       20K protein - Rickettsia rickettsii (fragment) C; Species: Rickettsia rickettsii C; Date: 31-Mar-1990 #sequence_revision 31-Mar-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 14
A32014
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C;Keywords: blocked amino end; pyroglutamic acid
F;1/Modified site: pyrrolidone carboxylic acid (Gln) #status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Title: Isolation and structure of an epidermal mitosis inhibiting pentapeptide. A;Reference number: A26830; MUID:87298602; PMID:3619940
A;Accession: A26830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C; Keywords:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      R;Inamoto, S.; Yoshioka, Y.; Ohtsubo, E.

3. Bacteriol. 170, 2749-2757, 1988
A;Title: Identification and characterization of the products from the traJ and traY general products in the traJ and traY general products in the traJ and traY general products from the traJ and tr
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C;Species: Mus musculus (house mouse)
C;Date: 19-Nov_1988 #sequence_revision 18-Aug-2000 #text_change 18-Aug-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
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A;Molecule type: DNA
A;Residues: 1-5 <INA>
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R; Reichelt, K.; Elgjo,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           tram protein - Escherichia coli plasmid R100 (fragment)
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#sequence_revision 31-Mar-1990 #text_change 28-May-1999
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C;Accession: B31836
R;Anderson, B.E.; Baumstark, B.R.; Bellini, W.J.
J. Bacteriol. 170, 4493-4500, 1988
A;Title: Expression of the gene encoding the 17-kilodalton antigen from Rickettsia ri A;Reference number: A91885; MUID:89008059; PMID:3139629
A;Accession: B31836
A;Molecule type: DNA
A;Residues: 1-5 <AND>
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                                                                                                                              A;Cross-references: GB:J03371; NID:g152455; PIDN:AAD15030.1; PID:g426287
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Title: Perfect score:

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AL11_CARMA
AL18_CARMA
AL14_CALVO
ALL5_CYDPO
ALL5_CYDPO
ANG2_BOTUA
CCKN_MACEU
COXG_RAT
FAR1_PANRE
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ACHI_ACHFU
OCP1_OCTMI
DIOA_CITFR
RE11_LITRU
UXA4_CHLTR
ASP2_LACSU
TRPI_PSEPU
ALL4_CARMA
ALL7_CURW
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AC P35904;
DT 01-JUN-1994
DT 01-JUN-1994
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J. Bacteriol. 172:6797-6802(1990).

-I- FUNCTION: ACYL-PROTEIN SYNTHETASE ACTIVATES TETRADECANOIC ACID.

IT IS A COMPONENT OF THE FATTY ACID REDUCTASE COMPLEX RESPONSIBLE FOR CONVERTING TETRADECANOIC ACID TO THE ALDEHYDE WHICH SERVES AS SUBSTRATE IN THE LUCIFERASE-CATALYZED REACTION.

-I- CATALYTIC ACTIVITY: ATP + an acid + protein - AMP + diphosphate + an acyl-protein thiolester.

-I- PATHWAY: Bioluminescent fatty acid reduction system; second step.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
MEDLINE-91072226; PubMed-2254256;
MEDLINE-91072226; PubMed-2254256;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        P24272:
01-MAR-1992 (Rel. 21, Created)
01-MAR-1992 (Rel. 21, Last sequence update)
01-OCT-1996 (Rel. 34, Last annotation update)
Long-chain-fatty-acid--luciferin-component ligase
                                                                                                                                                                                                                                                                                                                                                                                                       the European Bioinformatics Institute. There are no restrictions on use by non-profit institutions as long as its content is in no modified and this statement is not removed. Usage by and for commen entitles requires a license agreement (See http://www.isb-sib.ch/annou or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                       Luminescence; Ligase.
NON_TER 1
SEQUENCE 3 AA; 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Swartzman E., Kapoor S., Graham A.F., Meighen E.A.;
"A new Vibrio fischeri lux gene precedes a bidirectional termination
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NCBI_TaxID-668,
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Bacteria; Proteobacteria;
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29, Last seq
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100.0%; pr
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    sequence update)
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LCK3_LEUMA
LCK4_LEUMA
LCK6_LEUMA
LCK6_LEUMA
LCK7_LEUMA
LMT2_LOCMII
ORMY_ORCLI
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Result No.

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                                                                                            Eukaryota; Metazoa; Mollusca; Cephalopoda; Incirrata; Octopodidae; Octopus. NCBI_TaxID=89766;
                                                                                                                                                                                                                                                                                                                                      MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fujimoto K., Kubota I., Yasuda-Kamatani Y., Mina)
Yoshida M., Harada A., Muneoka Y., Kobayashi M.,
"Purification of achatin-I from the atria of the
Achatina fulica, and its possible function.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CHARACTERIZATION.
STRAIN-Ferussac; TISSUE-Heart atrium;
MEDLINE-91264856; PubMed-1675568;
         Octopus minor.";
Peptides 21:623-630(2000).
                                                                         SEQUENCE, SYNTHESIS,
                                                                                                                          Cardioactive peptides Ocp-1/Ocp-2.
Octopus minor (Octopus).
                                                                                                                                                                                                                                                                                                                                                                                                                       (H-Gly-D-Phe-Ala-Asp-OH), an endogenous D-amino acid residue.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRAIN-Ferussac; TISSUE-Ganglion; MEDLINE-89273551; PubMed-2597281;
                                                     MEDLINE=20336815;
                                                                 TISSUE-Brain
                                                                                                                                                                               OCP1_OCTMI
P58648;
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                                                                                                                                                                                                                                                                                                                              SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     X-RAY CRYSTALLOGRAPHY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Biochem.
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Funase K., Sun X.P., Yongsiri A., Kim K.H., Novales-Li
Novales E.T., Kanapi C.G., Takeuchi H., Nomoto K.;
"Achatin-I, an endogenous neuroexcitatory tetrapeptide
fulica Ferussac containing a D-amino acid residue.";
Biochem. Biophys. Res. Commun. 160:1015-1020(1989).
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Achatinacea; Achatinidae;
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Achatin-I
                                "Cardioactive
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Eukaryota; Metazoa; Mollusca; Gastropo
                                          wakoshi E., Hisada
                                                                                                                                                                                                                                                                                                                                                                                                                                           Crystal structure and molecular conformation
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J. Pept. Protein Res. 39:258-264(1992).
FUNCTION: NEUROEXCITATORY PEPTIDE; INCREASES THE IMPULSE FREQUENCY AND PRODUCES A SPIKE BROADENING OF THE IDENTIFIED HEART EXCITATORY NEURON (PON); ALSO ENHANCES THE AMPLITUDE AND FREQUENCY OF THE NEURON (PON); ALSO ENHANCES THE AMPLITUDE AND FREQUENCY OF THE
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                           Hisada M., Minakata H.;
peptides isolated from
 Cardioactive;
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                                                     PubMed=10876044;
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                                                                         SPECTROMETRY,
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6AADD9C810000000 (
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Pred. No
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i M.;
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RESULT 4
OCP3_OCTMI
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Best Local
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15-JUN-2002
15-JUN-2002
15-JUN-2002
                                               BIOA
                                                                  01-JAN-1990 (Rel. 13, Created)
01-JAN-1990 (Rel. 13, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Adenosylmethionine-8-amino-7-oxononanoate aminotransferase
(EC 2.6.1.62) (7,8-diamino-pelargonic acid aminotransferase)
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MOD_RES
NCBI_TaxID=546;
             Citrobacter
                        Bacteria;
                                    Citrobacter
                                                          aminotransferase)
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01-JAN-1990
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Octopus minor.":
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                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE-20336815;
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SUBCELLULAR LOCATION: Secreted.
PTM: Ocp-2 has L-Phe instead of
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                                                                                                                                                                                                                                                                                                                    D-amino acid.
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                                                                                                                                                                                                                                                                                                                                          Ocp-4 has D-Ser
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                     Proteobacteria;
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6AA879C8100000000
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Query Match
Best Local Similarity
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Best Local
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P82070;
                                                                                                                                                      TISSUE-Skin secretion;
Steinborner S.T., Wabnitz P.A., Waugh R.J.,
Tyler M.J., Wallace J.C.;
                                                                                                                                                                                                                             Litoria rubella (Desert tree frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Neobatrachia; Bufonoidea; Hylidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rosite; ps00600; aa_transfer_Class_3; partial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            between the Swiss Institute of Bioinf
the European Bioinformatics Institute
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gene 67:203-211(1988).
-i   CATALYTIC ACTIVITY: S-adenosyl-L-methionine +
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Transcriptional regulation and gene arrangement of Escherichia coll, Citrobacter freundii and Salmonella typhimurium biotin operons.";
                                                                                                                                                                            TISSUE-Skin
                                                                                                                                                                                                                    Amphibia; Batrachia; An
Pelodryadinae; Litoria.
                                                                                                                                                                                                                                                               Rubellidin 1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -1- COFACTOR: PYRIDOXAL PHOSPHATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE-89006280;
Shiuan D., Campbel
                                                                     -!- TISSUE SPECIFICITY:
                                                                                                   "The structure of new peptides from the Australin red tree frog 'Litoria rubella'. the skin peptide profile as a probe for the soft evolutionary trends of amphibians.";

Aust. J. Chem. 49:955-963(1996).

-1- FUNCTION: SHOW NEITHER NEUROPEPTIDE ACTIVITY NOR ANTIBIOTIC
                                                                                                                                                                                       SEQUENCE,
                                                                                                                                                                                                                                                                                                                             LITRU
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                                                                                                                                                                                                                                                                        15-JUN-2002
15-JUN-2002
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                                                                                              FUNCTION: SHOW NEITHER
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IPR000954; Aminotran_3.
                                                                                                                                                                                      AND MASS SPECTROMETRY.
                                                                                SPECIFICITY:
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MW=598; MI
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Pred. No. 0;
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Best Local :
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01-JAN-1990
15-DEC-1998
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30-MAY-2000
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PIR; A32014; A320
                                       STRAIN-L2/434/Bu;
Bini L., Santucci
                                                            SEQUENCE.
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                   Pallini V.
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J. Bacteriol. 170:2749-2757(1988).
-I- FUNCTION: TRANSFER GENE PROTEIN. IS INVO
   -1- MISCELLANEOUS: O
                                                                                    Bini I., Santucci A., Magi
Comanducci M., Christianen
                                                                                                                                                                                                                                                                        Chlamydia trachomatis.
Bacteria; Chlamydiales; Chlamydia
                                                                                                                                                                                                                                                                                                                                            Unknown protein from 2D-page
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conjugation; Plasmid; DNA-binding.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Plasmid IncFII R100.
Bacteria; Proteobacteria;
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an email to license@isb-sib.ch).
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4) to the SWISS-PROT data bank.
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Siena-2DPAGE;
NON_TER
                                             BIOChimie 71:521-531(1989).

-i- FUNCTION: ACTIVATES THE EXPRESSION OF THE TRPBA-
THE TWO TRYPTOPHAN SYNTHASE SUBUNITS. IN THE AB
INDUCER (INDOLEGLYCEROL PHOSPHATE), TRPI BINDS
                                                                                                                                                                                             SEQUENCE FROM N.A. STRAIN-PPG1 C1S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Microbiology
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Acid
                                                                                                                                                                             MEDLINE-89335826; PubMed-2503057;
                                                                                                                                                                                                                                                NCBI_TaxID=303;
                                                                                                                                                                                                                                                                    Pseudomonas
                                                                                                                                                                                                                                                                                 Bacteria; Proteobacteria;
                                                                                                                                                                                                                                                                                                   rseudomonas
                                                                                                                                                                                                                                                                                                                                    TrpBA operon
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01-FEB-1995
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P36414;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bacteria; Firmicutes;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=1625;
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                                                                                                                                                                                                                                                                                                                                                                                       -JUN-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Angelis M., Bini L., Pallini V., Cocconcelli P.S., he acid-stress response in Lactobacillus sanfrancis crobiology 147:1863-1873(2001).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -OCT-2001 (Rel.
TRPAB OPERON, SIMILARITY: BE REGULATORS.
                                                                                                                                     ly L., Crawford I.P.; sequence of the tryptophan synthase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INDUCTION:
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1; Conserv
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llarity 100.0%;
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                BELONGS
                              OVERLAPPING ITS OWN PROMOTER REGION
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31,
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                THE LYSR FAMILY OF
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ED IN ACID ENVIRONMENTS
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                TRANSCRIPTIONAL
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                                                                   ABSENCE O
                                                                                                                                        Pseudomonas
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                                                   UPSTREAM
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censis CB1.";
                                                                                   ENCODING
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RESULT 11
ALL4_CARMA
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Best Local
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                                                                     ALL7_CYDPO
P82158;
                                                                                           _CYDPO
                    Cydia pomonella (Codling moth).
                                Cydiastatin
                                                   30-MAY-2000
30-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and for entities requires a license agreement (See http://www.isb-sib.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This
            Eukaryota;
                                          30-MAY-2000
                                                                                                                                                                                                                Neuropeptide;
SEQUENCE 7 /
                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Arthropoda; Mandibulata; Pancrustacea; Crustacea; Malacostraca; Eumalacostraca; Eucarida; Decapoda; Pleocyemata; Brachyura; Eubrachyura; Portunoidea; Portunidae; Carcinus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            entities requires a license agreement (or send an email to license@isb-sib.ch)
                                                                                                                                                                                                                                                                allatostatin superfamily in
                                                                                                                                                                                                                                                                                     Thorpe A.;
                                                                                                                                                                                                                                                                                             Duve H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                                        FISSUE=Cerebral ganglion, and Thoracic
MEDLINE=98121193; PubMed=9461295;
                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                              NCBI_TaxID=6759
                                                                                                                                                                                                                                                                                                                                                                                     Carcinus maenas (Common shore crab)
                                                                                                                                                                                                                                                                                                                                                                                                 Carcinustatin
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30-MAY-2000
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    the European Bioinformatics Institute.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               between
                                                                                                                                                                                                                                                                        Isolation and identification of multiple
                                                                                                                                                                                                                                     SIMILARITY:
                                                                                                                                                                                                                                         J. Biochem. 250:727-734(1997).
FUNCTION: MAY ACT AS A NEUROTRANSMITTER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SWISS-PROT entry is copyright. It is produced through een the Swiss Institute of Bioinformatics and the EN
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A; Metazoa;
Pterygota;
                                                                                                                                                                         1;
                                                                                                                                                                                 Similarity
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                                                                                 STANDARD;
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                                                                                                                                                                                                                                   BELONGS TO THE ALLATOSTATIN
                                        39,
                                                                                                                                                                                                                                                                                                                                                                                                        39, Created)39, Last sequence update)39, Last annotation updat
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 Arthropoda;
Neoptera; E
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i; Mandibulata;
Endopterygota;
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                                                                                                                                                                                                                                                                                            Scott A.G.,
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DB
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 Pancrustacea;
Lepidoptera;
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Glossata;
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P16101;
                                       Helisoma trivolvis (Snail).
Eukaryota; Metazoa; Mollusca;
Planorbidae; Helisoma.
                                                                               01-NOY-1995 (Rel. 32, Created)
01-NOY-1995 (Rel. 32, Last sequence up
01-NOY-1995 (Rel. 32, Last annotation
                                                                                                                                                                                                                                                                                                                                                                                                                          01-APR-1990 (Rel. 14, Created)
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01-APR-1990 (Rel. 14, Last annotation
Choline oxidase (EC 1.1.3.17) (Fragmer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Lepidopteran peptides of the allatostatin superfamily."; Peptides 18:1301-1309(1997).
                                                                   OLT-NOV-1995 (Rel. 32, Last annotation update)
FMRFamide-like neuropeptide GDPFLRF-amide.
                                                                                                              FAR1_HELTI
P41871;
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Davey M., East P.D., Thorpe
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 TISSUE-Kidney;
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Mercler A.J., Orchard I., Tebrugge V., Skerrett
"Isolation of two FMRFamide-related peptides fro
pericardial organs.";
Peptides 14:137-143(1993).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rrucambarus clarkii (Red swamp crayfish).
Eukaryota; Metazoa; Arthropoda; Mandibulata; Pancrustacea; Crustacea;
Malacostraca; Eumalacostraca; Eucarida; Decapoda; Pleocyemata;
Astacidea; Astacoidea; Cambaridae.
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MOD_RES
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TISSUE SPECIFICITY; KIDNEY. CETTY
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075189 neisseria m
085406 coxiella bu
09r975 buchnera ap
09r979 buchnera ap
09r972 escherichia
p72279 rhodococcus
056759 xanthobacte
P83158 anabaena sp
051594 escherichia
                                                                                                                                  Description
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NCBI_TaxID=1396;
              NifK (Fragment).
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BICOME N., Dowds B.C.A.;
Submitted (JUL-2001) to the SWISS-PROT data bank.
NON_TER 5
SEQUENCE 5 AA; 623 MW; 6B0lAAA336F00000 CRC64
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Bacillus cereus.
     Synechococcus sp. (strain PCC 8801 / RF-1) (Cyanothece PCC 8801).
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                                     Alpha-myosin heavy chain (Frag
Oryctolagus cuniculus (Rabbit)
Eukaryota; Metazoa; Chordata;
                                                                                             01-NOV-1996 (TrEMBLrel. 01, Created)
01-NOV-1996 (TrEMBLrel. 01, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
    NCBI_TaxID=9986;
                                                                                                                                                                   Q28742;
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SEQUENCE
                        Mammalia; Eutheria;
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Palaemonoidea; Palaemonidae;
NCBI_TaxID=79674;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FMRPamide-like neuropeptide FLP1 (DRNFLRF-amide).
Macrobrachium rosenbergii (Giant fresh water prawn).
Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca;
Eumalacostraca; Eucarida; Decapoda; Pleocyemata; Caridea;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-MAR-2002 (TrEMBLrel. 01-MAR-2002 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Neuropeptide;
MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Huang T.C., Lin R.F., Chu M.K., Chen H.M.; "Organization and expression of nitrogen-fixation genes in the aerobic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      freshwater prawn Macrobrachium
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bacteria; Cyanobacteria;
NCBI_TaxID=41431;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Microbiology 145:743-753(1999).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel FMRFamide-like neuropeptides from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ithigorngul P., ithigorngul W.;
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SIMILARITY: BELONGS
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ASS SPECTROMETRY: MW-965.7; METHOD-MA
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nilarity 100.
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                      Lagomorpha;
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69D40729C4540AC0
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Pred. No
                Craniata; Vertebrata; Euteleostomi;
a; Leporidae; Oryctolagus.
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Mahalingam R., Knap H.T.;
Submitted (FEB-1998) to the EMBL/GenBank/DDBJ
EMBL; AF047050; AAC03556.1; -.
RON TER
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                                                 Q63480;
01-NOV-1996 (TrEMBLrel.
01-NOV-1996 (TrEMBLrel.
01-DEC-2001 (TrEMBLrel.
       Eukaryota;
Mammalia; E
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EMBL;
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SEQUENCE FROM N.A.
MEDLINE-84221901; PubMed-6328491;
                          Rattus norvegicus (Rat).
                                             TR4-NS
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MEDLINE-91367679;
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01-DEC-2001 (TrEMBLrel.
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PubMed-1891369;
       Chordata;
Rodentia;
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01-MAY-1999
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01-JUN-1998
01-DEC-2001
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Detera-Wadleigh S.D.;
"Splice variants of rat TR4
of novel semiconomics."
                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM THE STRAIRS PRAGUE DAWLEY;
STRAIR-SPRAGUE DAWLEY;
MEDLINE-96198747; PubMed-8612486;
MEDLINE-96198747; PubMed-8612486;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Receptor.
                                                                                                                                                                              Yoshikawa T., DuPont B.R., Leach R.J., Detera-Wadleigh S.D.; "New variants of the human and rat nuclear hormone receptor, expression and chromosomal localization of the human gene."; Genomics 35:361-366(1996).
EMBL: U59454; AAB91433.1; -.
                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa;
Mammalia; Eutheria;
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SEQUENCE FROM N.A.
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EMBL; U59125;
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ptor TR4-NS (Fragment).
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01-NOV-1998 (TrEMBLrel. 08,
01-DEC-2001 (TrEMBLrel. 19,
Hypothetical 1.0 kDa protein
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Microbiology 141:0-0(0)
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                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN-NINE MILE PHASE I;
MEDLINE-98348442; Pubmed-9683477;
Willems H., Jaeger C., Baljer G.;
"Physical and genetic map of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bacteria; Proteobacteria;
Coxiella group; Coxiella.
NCBI_TaxID=777;
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01-NOV-1998
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"Complexity of the variable sequence between the carbam synthase genes of Neisseria species.";
Submitted (OCT-1997) to the EMBL/GenBank/DDBJ databases
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Bacteria; Proteobacteri
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Mol. Biol. Evol. 16:1586-1598(1999).
FMRL: AF130812; AAF13797.1; -.
              Escherichia coli.
Bacteria; Proteobacteria;
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Bacteria; Proteobacteria;
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Plark M.A., Moran N.A., Baumann P.;
Sequence evolution in bacterial endosymbionts having extreme base
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Slark M.A., Moran N.A., Baumann P.;
Sequence evolution in bacterial endosymbionts
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MEDLINE-95255652; PubMed-7737502;
Asturias J.A., Diaz E., Timmis K.N.;
"Evolutionary relationship of the bi
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Actinomycetales; Corynebacterineae; No
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01-DEC-2001
01-DEC-2001
01-DEC-2001
                                                                                                                                                                                                                                        PHOTOSYSTEM I COMPLEX.

- SUBCELLULAR LOCATION: CYTOPLASMIC.
- SIMILARITY: THE IRON-SULFUR CENTERS ARE SIMILAR TO THOSE OF BACTERIAL-TYPE' 4FE-4S FERREDOXINS.

Interpro; IPR001450; 4Fe4S_ferredoxin.
PROSITE; PS00198; 4Fe4S_FERREDOXIN; PARTIAL.
Photosysthem I; Iron-sulfur; 4Fe-4S; Metal-binding.
NON_TER

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01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-DEC-2001 (TrEMBLrel. 19, Last annotation update)
Photosystem I iron-sulfur center (Photosystem I subunit VII) (9 kDa polypeptide) (PSI-C) (Fragment).
Anabaena sp. (strain L31).
Bacteria; Cyanobacteria; Nostocales; Nostocaceae; Anabaena.
NCBI_TaxID-29412;
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STRAIN-GJ10, AND CV. M50;

MEDLINE-95173113; PubMed-7868610;

Van der Ploeg J., Willemsen M., van Hall G., Janssen D.B.;

Van der Ploeg J., Willemsen M., van Hall G., Janssen D.B.;

"Adaptation of Xanthobacter autotrophicus GJ10 to bromoacetate due to activation and mobilization of the haloacetate dehalogenase gene by
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Apte S.K., Uhlemann E., Schmid R., Altendorf K.; Submitted (OCT-2001) to the SWISS-PROT data bank.
-!- FUNCTION: APOPROTEIN FOR THE IRON-SULFUR CENTERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              insertion element IS1247.";
J. Bacteriol. 177:1348-1356(1995).
EMBL; X84038; CAA58857.1; -.
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Hyphomicrobium group; Xanthobacter.
NCBL_TaxID=280;
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nes 1; Conserva
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Local Similarity 100.0%; P
nes 1; Conservative 0;
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ABB76254
AAY97855
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ABP29565
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Streptococcus poly
Staphylococcus aur
Staphylococcus aur
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                                                                        Human brain expres
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ALIGNMENTS

03-OCT-2000 (first entry) WPI; 2000-452370/39. N-PSDB; AAA47147. Streptococcus pyogenes. Sperantigen; SMEZ-2; SPE-G; SPE-H; SPE-J; Streptococcal disease; Kawasaki syndrome; T cell activation; cancer therapy. AAY93741; AAY93741 standard; Protein; 233 AA. 24-DEC-1999; 06-JUL-2000 WO200039159-A1. Amino acid sequence of the mature SMEZ-2 superantigen protein. Fraser JD, (AUCK-) AUCKLAND UNISERVICES LTD. 24-DEC-1998; Proft T; 98NZ-0333589. 99WO-NZ00228

Peptide #6013 enco Human peptide enco Amino acid sequenc

Novel superantigens from streptococcus pyogenes useful for genotyping streptococcus pyogenes clones expressing SMEZ-2 and for diagnosing a Kawasaki syndrome

Peptide #6013

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Claim

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Fig

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72pp; English.

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RESULT 2
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24-NOV-2000;
07-MAR-2001;
        The invention relates to a protein (ABP25413-ABP30895) from group B streptococcus/GBS (Streptococcus agalactiae) or group A streptococcus/GAS (Streptococcus pyogenes), comprising one of 5483 sequences (S1), given in the specification. The proteins have antibacterial and antiinflammatory activity. (I), nucleic acids encoding (I), ABN66044-ABN71526 and antibodies that bind (I) are used in the manufacture of medicaments for the treatment or prevention of infection or disease caused by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Streptococcus; GAS; GBS; group B streptococcus; Streptococcus agalactiae; group A streptococcus; Streptococcus pyogenes; antibacterial; antiinflammatory; infection; vaccine; meningitis; gene therapy.
                                                                                                                                                                   or disease
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                                                                                                                           Claim
                                                                                                                                                                                                                                                      Tettelin
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                                                                                                                                                   Streptococcus protein for the treatment or prevention of infection disease caused by Streptococcus bacteria, such as meningitis, and detecting a compound that binds to the protein -
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DB; ABN70196.
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INST GENOMIC RES.
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; 2001GB-0005640.
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                                                                                                                                                                 WPI; 2002-415198/44.
                                                                                                                                                                                    Terman
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02-MAR-1993;
                                                                                                                                                                                                                                                                   31-JAN-1994;
19-JUN-1995;
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                                                                                                                                                                                                                                                                                                                                                      Staphylococcus aureus
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                                                                                                                                                                                                      (TERM/) TERMAN D
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                                                                                                                                                                                                                                                                                                                                                                                 Enterotoxin
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                                                                                                                                                                                                                                                                                                                                                                    C; SEC1; therapy.
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                                                                                                                                                                                                                                                                                               2000US-0741503
                                                                                                                                                                                                                       91WO-US00342.
92US-0891718.
93US-0025144.
                                                                                                                                                                                                                                                  95US-0491746.
89US-0416530.
90US-0466577.
                                                                                                                                                                                                                                                                                                                                                                                SEC1; superantigen; antigen; tumour;
                                                                                                                                                                                                                                                                             94US-0189424
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S
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                    entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       183
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Pred. No.
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81;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 258;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                cancer;
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0

The present sequence corresponds to amino acids 151-167 of enterotoxin C1 (SEC1, see ABB76238) of Staphylococcus aureus. Sequence similarities are found in the corresponding regions of other staphylococcal enterotoxins and streptococcal yrrogenic exotoxins (see ABB76252-59). In the present invention, synthetic polypeptides useful in tumour therapy and in blocking or destroying autoreactive T and B lymphocyte populations are characterised by substantial structural homology to staphylococcal enterotoxin A and enterotoxin B, and to streptococcal pyrogenic exotoxins, with statistically significant sequence homology and similarity, Reagent for treating cancer without the need for e.g. radiotherapy, comprises a specific V beta subset of $\mathbb T$ cells sensitized to a growletumor and stimulated with superantigens -Disclosure; Page 4; 17pp; English. growing

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RESULT 4
AAY97855
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Best Local
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                                                                                                                                                               The invention relates to novel peptides (AAY97838-Y97843) comprising a consensus amino acid sequence derived from two conserved regions (regions 1 and 2) of Staphylococcal streptococcal pyrogenic toxins. Consensus region 1a (a preferred consensus region 1) has the sequence X25-X26-Y-G-G-X1-T-X2-X3-X4-X5-N (AAY97863) and consensus region 2a (a preferred consensus region 2) has
                                             x3, x5
of any
                                                        (AAY97864), where: X1, X8, X13 and X24 are each independently selected from L, I and V; X2,X4, X5, X6, X7, X9, X10, X11, X12, X14, X15, X16, X17, X18, X19, X20, X21, X22 and X23 are each independently selected from the group consisting of any amino acid; X3, X5 and X26 are each independently selected from the group consisting
                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-OCT-1998;
18-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           more superantigens ex vivo to generate stimulated cells, selecting a specific V beta subset of cells, and reintroducing these cells into the patient to induce an in vivo therapeutic, tumouricidal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    including their metastases, without radiation, surgery or standard chemotherapeutic agents. A claimed method of human cancer treatment involves contacting haematopoietic cells from a patient with one or
                                                                                                                                                                                                                                                                                                    syndrome and septic shock from infections -
                                                                                                                                                                                                                                                                                                                                                                     WPI; 2000-303782/26
                                                                                                                                                                                                                                                                                                                                                                                                 Bannan JD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200020598-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Staphylococcus aureus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Staphylococcal infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Staphylococcus aureus enterotoxin SEC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAY97855;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAY97855 standard; peptide;
                                                                                                                                    X9-X10-X11-X12-X13-D-X14-X15-X16-R-X17-X18-X27-X19-X20-X21-X22-X23-X24-Y
                                                                                                                                                                                                                                                                          Example 1; Page 72; 115pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                              (UYRQ ) UNIV ROCKEFELLER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              vaccine; antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                reaction
 which
                                                                                                                                                     the sequence K-X6-X7-X8-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      profiles.
invention also relates to serum antibodies induced by the peptides the provide protection against, or reduce the severity of toxic shock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     l Similarity
5; Conserva
                            either L or
                                             amino acid and of no amino acid,
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                                                                                                                                                                                                                                                                                                                                                                                              Visvanathan K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     These superantigens are used to treat solid tumours
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99US-0335581
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50.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            enterotoxin; septic shock; toxic shock;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24 AA
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                 Zabriskie
                                                                                                                                                                                                                                                                                                                    and reducing the symptoms of toxic shock staphylococcal and streptococcal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        conserved region
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23;
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Matches

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Query Match
Best Local
                                                                                                                                                                                                                                                                                  of the peptides for diagnostic reagents, as vaccines and for theraples for pyrogenic exotoxin related diseases. Vectors expressing high levels of the peptides can be used in immunotherapy and immunoprophylaxis when expressed in humans. The antibodies are used for passive immunisation therapy to prevent or increase resistance to toxic shock syndrome or septic shock and to ameliorate the effects of conditions associated with the presence of staphylococcal or streptococcal pyrogenic toxins. The anino acid sequences of the peptides are sufficiently common that they can be used for eliciting antibodies which are cross-reactive with toxins derived from various bacteria. Sequences AxY97853-Y97861 represent conserved region 2 of various Staphylococcus aureus enterotoxins and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               simultaneously binding the lateral face of the T-cell receptor (TCR) while simultaneously binding the lateral face of the class II major histocompartibility complex (MHC) of antigen presenting cells. This causes aberrant proliferation of T-cells, which stimulates other components of the immune system, causing injury to the host. The peptides are used to prevent, treat or protect against toxic shock and septic shock resulting from bacterial infections in mammals, particularly humans. The peptides are used for inducing serum antibodies that bind at least one staphylococcal enterotoxin or streptococcal exotoxin and both the peptides and antibodies can be used in diagnostic assays to aid in the diagnosis of disease related to the presence of bacterial toxins. Nucleic acids encoding a peptide of the invention can be used for the production
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             exotoxins) constitute a family of structurally related toxins which share similar biological activities. They stimulate CD4+, CD8+ and gamma-delta+ T-cells by binding the beta-chain variable region (V-beta) elements on the lateral face of the T-cell receptor (TCR) while
                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and septic shock caused by the staphylococcal and streptococcal pyrogenic toxins. The pyrogenic exotoxins of Group A streptococ
                                                                                                                                                                                                                                                        Group A streptococci pyrogenic exotoxins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  enterotoxins of Staphylococcus aureus (which are also
Similarity
5; Conserv
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    Conservative
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                                               50
                                           . 78;
                                           Score 23;
Pred. No.
    Mismatches
                                           DB
14;
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                                                                                  Length 24
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RESULT 5
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AAY72193 standard; peptide; 24
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                                                                             AAY72193;
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                                                                                                        KXXXTXQEXD 12
                                                                       (first entry)
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Peptide from region 2 of staphylococcal enterotoxin SEC

Providing protection against, and reducing the severity of,

WPI; 2001-080820/09.

Visvanathan K, Zabriskie JB,

(UYRQ) UNIV ROCKEFELLER

18-JUN-1999;

9905-0336627

16-JUN-2000; 2000WO-US16680

28-DEC-2000 WO200078790-A2 Staphylococcus

autoimmune disease; staphylococcal enterotoxin;

immunisation

human

inhibitor; 1mmunodeficiency

HIV; replication; therapy;
iciency virus; T cell;

Mononuclear cell; blastogenesis;

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RESULT 6
AAM59147
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Best Local S
Matches 5
 The present invention provides a number of single exon nucleic ac probes which are derived from genomic sequences expressed in the brain. They can be used to measure gene expression in brain cell which may enable the diagnosis and improved treatment of nervous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The peptide, nucleic acid encoding the peptide and antibody (Ab) produced against the peptide are useful for inhibiting blastogenesis of mononuclear cells (eg. T cells) in the presence of human immunodeficiency virus (HIV), inhibiting HIV replication and protecting a mammal against the deleterious effects of HIV. The peptide is also used to ameliorate the effects of autoimmune diseases associated with the presence of HIV. The Ab is used for passively immunising a mammal against the deleterious
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     immunodeficiency virus infections and associated deleterious effects, using peptides from homologous sequences of staphylococcal and streptococcal toxins \, -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; brain expressed exon; gene expression analysis; probe; microarray; Alzheimer's disease; multiple sclerosis; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           enterotoxin SEC.
                                                                                                                                                   WPI; 2001-483446/52
                                                                                                                                                                                                                                                        21-SEP-2000;
27-SEP-2000;
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30-JUN-2000;
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                                                                                                            exon nucleic acid
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2000US-0207456.
2000US-0608408.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  expressed single
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                                                                                                                                                                                                                                                        2000US-0234687.
2000US-0236359.
                                                                                                                                                                                                                                         2000GB-0024263.
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                                                                         31252;
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                                                                                                                   for analyzing
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14;
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RESULT 7
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26-MAY-2000;
30-JUN-2000;
30-AUG-2000;
21-SEP-2000;
                                                                          The present invention provides a number of single exon nucleic probes which are derived from genomic sequences expressed in the bone marrow. They can be used to measure expression in bon samples, which may enable the improved diagnosis and treatment such as lymphoma, leukaemia and myeloma. The present sequence i protein encoded by one of the probes of the invention.
                                                                                                                                                                                                               Penn
                                                                                                                                                                                                                                                                                                                                                                                                      Human; bone marrow e
microarray; cancer;
                                                          Sequence
                                                                                                                                                               Human genome-derived single exon nucleic acid analyzing gene expression in human bone marrov
                                                                                                                                                                                                                                                                                                                                                                                      Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia, epilepsy and cancers. The present sequence is a protein encoded by one of the invention.
                                                                                                                                                                                                                                                                                                                                                 09-AUG-2001
                                                                                                                                              Example 4;
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                                                                                                                                                                                                                                                                                                                                                                   WO200157276-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                    Human bone marrow
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                    Similarity
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2000US-0207456
2000US-0608408
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2000US-06323687
2000US-0236359
2000US-0236359
2000US-0236359
                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                              2001WO-US00668
                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                         Ä,
                                                                                                                                                                                                               Ď,
                                                                                                                                                                                                                                                                                                                                                                                                                                    expressed
                                                                                                                                                                                                                                                                                                                                                                                                                 expressed exon;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Protein;
12
                                                                                                                                                                                                                                                                                                                                                                                                         leukaemia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12
                            69.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        69.78;
50.08;
                                                                                                                                             31989; 658pp + Sequence Listing;
                                                                                                                                                                                                               Chen
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                    0,
                                                                                                                                                                                                                                                                                                                                                                                                                                    probe encoded
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                             Score 23;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score
Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                               Rank
                                                                                                                                                                                                                                                                                                                                                                                                        Lymphoma; myeloma.
                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23;
No.
                                                                                                                                                                bone marrow
                                                                                                                                                                                                                                                                                                                                                                                                                 gene expression
                                                                                                                                                                                                               뮸
                            DB
17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB
17;
                                                                                                                                                                                                                                                                                                                                                                                                                                   protein
                                      22;
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                                                                                                                                                                       probes
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                                      Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                 analysis;
                                                                                    sequence is
                                                                                                                                                                         useful
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                                      29
                                                                                                                                             English
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                                                                                                        bone marrow
                   0
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                                                                                                                                                                                                                                                                                                                                                                                                                 probe;
                                                                                              of cancers
                   Gaps
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RESULT 9
ABG41496
ID ABG4
XX
AC ABG4
XX
DT 19-F
XX
DE Hume
XX
KW Hume
KW Chrc
KW Chrc
KW tube
KW Herm
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AAM31976
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                Human geno
analyzing
                                                                                                                                                                                                                                                                                  The present invention relates to single exon nucleic acid probes (SENP: see AAI31315-AAI57546). The present sequence is a peptide encoded by one such probe. The probes are useful for producing a microarray for predicting, measuring and displaying gene expression in samples derived from human placenta. The probes are useful for antenatal diagnosis of human genetic disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 genetic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Probe; microarray;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Peptide #6013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-OCT-2001
         Human; single exon probe; asthma; lung cancer; COPD; IID; chronic obstructive pulmonary disease; interestitial lung disfamilial idiopathic pulmonary fibrosis; neurofibromatosis; tuberous sclerosis; Gaucher's disease; Niemann-Pick disease;
                                                             Human
                                                                                                                            ABG41496 standard;
                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-FEB-2000;
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                                                                                  19-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                         (MOLE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JAN-2001; 2001WO-US00663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            )3-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                               2001-488897/53
                                                                                                                                                                                                                                                                                                                                                                                         genome-derived single exon nucleic acid probes useful
                                                                                                                                                                               10
                                                             peptide
                                                                                                                                                                                                   3 KXXXTXQEXD
                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                         MOLECULAR DYNAMICS INC.
                                                                                                                                                                              KALSTGQEID
                                                                                                                                                                                                                                                                                                                                                                                gene expression
                                                                                                                                                                                                                                                                                                                                                             SEQ ID No
                                                                                                                                                                                                                                                                                                                                                                                                                                    Hanzel
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2000US-02346B7.
2000US-0236359.
2000GB-0024263.
                                                                                                                                                                                                                        Conservative
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                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000US-0608408.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              encoded by probe
                                                             encoded by
                                                                                                                                                                                                                                                                                                                                                                                                                                    Ŗ,
                                                                                                                          Peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          human; placenta;
                                                                                                                                                                                                  12
                                                                                                                                                                                                                                                                                                                                                           32245; 654pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   entry)
                                                                                                                                                                                                                                 69.7%;
50.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Chen
                                                             genome-derived single exon probe
                                                                                                                                                                                                                                                                                                                                                                               in human placenta
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Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                     Rank DR;
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                                                                                                                                                                                                                                                                                                                                                           English.
                                                                                                                                                                                                                                 No ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              measuring placental gene expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antenatal diagnosis;
                                                                                                                                                                                                                                 DB
17;
                                                                                                                                                                                                                                          22;
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                                                                                                                                                                                                                                         Length 29
haemosiderosis;
                              disease;
                                                             SEQ
                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                            for
                                                             IJ
                                                                                                                                                                                                                       Gaps
                                                              31161
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04-FEB-2000;
26-MAY-2000;
30-JUN-2000;
03-AUG-2000;
21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                         pulmonary histiocytosis; lymphangioleiomyomtosis; Karagener syndrome; pulmonary alveolar proteinosis; fibrocystic pulmonary dysplasia; primary ciliary dyskinesis; pulmonary hypertension; hyaline membrane disease.
                                                                                                                                                                                                                                                                                                                                30-JAN-2001; 2001WO-US00665
                                                                                                                                                                                                                                                                           (MOLE-)
                                                                                                                                                                                                                                                                                      04-OCT-2000;
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                                                                                                                                                                                                                                                                                                                                                     WO200186003-A2
                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                           MOLECULAR DYNAMICS INC.
                                                                                                                                                                                                                                                                                     2000US-234687P.
2000US-236359P.
2000GB-0024263.
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2000US-0608408.
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measure Spatially-addressable set of single gene expression in human lung exon nucleic acid probes, used samples ç

DK,

Chen W,

Rank DR;

ID No 31161; 634pp; English

CC nucleic acid expressed in the human lung; measuring gene expression in a consumple derived from human lung, comprising (a) contacting the array with a collection of detectably labeled nucleic acids derived from human lung (CMRNA, and (b) measuring the label detectably bound to each probe of comence of the array; identifying exons in a eukaryotic genome, comprising contacting the array; identifying exons in a eukaryotic genome, comprising contacting at least one exon from genomic sequences of the eukaryote; and (b) detecting specific hybridisation of detectably control of the exon probe is included in the above mentioned microarray; assigning exons, the probe is included in the above mentioned microarray; assigning exons, to a single exon probe, comprising (a) identifying exons from genomic sequence by the method contact and (b) measuring the expression of each of the exons in several continuous and/or cell types using hybridisation to a single exon continuous and/or cell types using hybridisation to a single exon continuous and for the exon, where a common pattern of continuous and for sequences, mentioned in the specification, or encoded by the expression analysis, and for identifying exons in a gene, particularly cusing human lung derived mRNA and for the study of lung disease (COPD), interstitial lung disease (ILD), familial idiopathic pulmonary disease. Hormansky-budlak syndrome, sarcoldosis, nulmonary contents, control contents, caucher's disease, nulmonary contents. Hormansky-budlak syndrome, sarcoldosis, nulmonary disease. The invention relates to a spatially-addressable set of single exc nucleic acid probes for measuring gene expression in a sample deri from human lung comprising single exon nucleic acid probes having 12614 nucleic acid sequences mentioned in the specification, or the complements or the 12387 open reading frames derived from the 1261 pulmonary dysplasia, primary ciliary dyskinesis, pulmonary and hyaline membrane disease. The present sequence is a pepencoded by a single exon probe of the invention.

Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electron format directly from WIPO at probes. Also included are a microarray comprising the novel set of probes; the novel set of probes which hybridise at high stringency Niemann-Pick disease, Hermansky-Pudlak syndrome, sarcoidosis, pul haemosiderosis, pulmonary histiocytosis, lymphangioleiomyomtosis, pulmonary alveolar proteinosis, Karagener syndrome, fibrocystic ftp.wipo.int/pub/published_pct_sequences in electronic hypertension pulmonary derived exon one ដ õ

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RESULT 11
AAR13208
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AAG63856
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                                                                                                          Matches
                                                                                                                 Query Match
Best Local
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Best Local :
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                         AAR13208 standard; Protein; 238 AA
                                                                                                                                                            a toxin that has improved scauzing, a toxin that has improved scauzing infectious diseases due to useful for preventing or treating infectious diseases due to microorganisms in animals such as cows, pigs, horses, sheep, hens,
                                                                                                                                                                                    The present sequence represents a modified Staphylococcal enterotoxin C1, designated SEC-SER. The modified toxin is characterised in that the 95th amino acid (cysteine) is substituted with serine. This results in a toxin that has improved stability. The modified enterotoxin is
                                                                                                                                                                                                                                                       Producing stable modified Staphylococcal toxin polypeptide for treating infectious diseases, e.g. mastitis, in animals, involves substituting cysteine at specified position of modified Staphylococcal toxin C1 with
         AAR13208;
                                                                                                                                           Sequence
                                                                                                                                                                                                                                 Claim 1; Page 59-60; 64pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Enterotoxin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                              WO200160851-A1
                                                                                                                                                                                                                                                                                                                                                                                                                             Staphylococcus sp
                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAG63856 standard; Protein; 228 AA
                                                                                                                                                                                                                                                   serine
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                                                                                                                                                                                                                                                                                                                                        (GLDS ) LG CHEM
                                                                                                                                                                                                                                                                                                                                                         17-FEB-2000; 2000KR-0007612
                                                                                                                                                                                                                                                                                                                                                                           31-OCT-2000; 2000WO-KR01241.
                                                                                                                                                                                                                                                                                                                                                                                            23-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAG63856;
                                                                      140 KKSVTAQELD 149
                                                                                                                                                                                                                                                                                            2001-522585/57.
DB; AAH74983.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 KXXXTXQEXD 12
                                                                                                         5
                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                       Park Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity 5; Conserv
                                                                                       KXXXTXQEXD 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sequence of a modified Staphylococcal enterotoxin
                                                                                                                                            228 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29
                                                                                                                                                                                                                                                                                                                                                                                                                                                        C1;
                                                                                                         Conservative
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                                                                                                                                                                                                                                                                                                                                         LTD.
                                                                                                                                                                                                                                                                                                                      Han
                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEC-SER; infectious disease; mastitis
                                                                                                                 69.7%;
50.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  50.0%;
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                                                                                                                                                                                                                                                                                                                      Chang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 23;
Pred. No.
                                                                                                       Score 23; DB 22;
Pred. No. 1.4e+02;
D; Mismatches 5;
                                                                                                                                                                                                                                                                                                                      В,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                       Lee
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17;
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                                                                                                                        Length 228;
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                                                                                                        Indels
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Best Local Similarity
Matches 5; Conserv
       01-JUN-1992;
                        01-JUN-1993;
                                                                           Staphylococcus
                                                                                             Staphylococcal enter autoimmune disease;
                                                                                                                        Staphylococcal
                                                                                                                                                                                                                                                                                          Sequence
                                                                                                                                                                                                                                                                                                             See
                                          09-DEC-1993.
                                                            W09324136-A
                                                                                                                                          08-JUN-1994
                                                                                                                                                           AAR45016;
                                                                                                                                                                                                                                                                                                                      similar
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (TERM/) TERMAN D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-JAN-1990;
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                                                                                                                                                                                                                                        KXXXTXQEXD
                                                                                                                                                                                                                      KKSYTAQELD
                                                                                                                                                                                                                                                                                           238 AA;
       92US-0891718
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SEC3 was isolated and purified from S.aureus. It can be used for treating cancer, activating cytokine mediators and procoagulant systems, augmenting natural killer cell cytotoxicity, etc. The enterotoxin can be administered intravenously, optionally with lbuprofen to attenuate toxic reaction to SEC3. Synthetic polypeptides having structural homology to Staphylococcal exotoxins are claimed, provided the homology includes statistically significant sequence homology, alignment of Cysteine residues and
                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR45016 standard; protein; 238 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Fig'l; 74pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Treating cancer with enterotoxin from Staphylococcus aureus -administered by IV injection, having same tumoricidal activity as Staphylococcal protein A without potential toxic reactions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEC3; cancer treatment; pyrogen; tumouricide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Staphylococcus aureus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ilar hydropathy profiles 
AAR13203-R13211.
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                                                                                                                                                    aureus.
                                                                                                                                                                                                                           enterotoxin;
                                                                                                                                                                                                                                                                                enterotoxin SEC3.
93WO-US05213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            90US-0466577.
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                                                                                                                                                                                                      toxicity; Protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       69.7%;
50.0%;
                                                                                                                                                                                                                              SE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 23; DB 12;
Pred. No. 1.4e+02;
                                                                                                                                                                                                   cancer; tumouricidal agent;
rotein A; perfusion system.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 238;
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AAB67343
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Best Local S
Matches 5
                                                                                                                                       31-JAN-1994;
19-JUN-1995;
03-OCT-1989;
17-JAN-1990;
17-JAN-1991;
01-JUN-1992;
02-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        which may be used in the methods of the invention for treating cancer in a patient. These SEs, and homologues of them, can be used as tumouricidal agents for treating cancers and autoimmune disease. They exhibit tumouricidal activity and toxicity identical to that observed for the Protein A perfusion system. They may be administered
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Use of staphylococcal enterotoxin(s) and homologues
 The present invention relates to a
                    Disclosure; Fig
                                       and a costimulatory molecule
                                               Tumor cell capable of stimulating antitumor immune reactivity in vitro or in vivo comprises exogenous nucleic acids encoding a superantigen
                                                                                                                                                                                                                       30-OCT-1998;
                                                                                                                                                                                                                                          30-JAN-2001
                                                                                                                                                                                                                                                              US6180097-B1
                                                                                                                                                                                                                                                                                Staphylococcus
                                                                                                                                                                                                                                                                                                    Tumour; cancer;
                                                                                                                                                                                                                                                                                                                       Staphylococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Fig 1; 90pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          treating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI;
                                                                              WPI; 2001-158657/16.
                                                                                                  Terman
                                                                                                                     (TERM/) TERMAN
                                                                                                                                                                                                                                                                                                                                           23-APR-2001
                                                                                                                                                                                                                                                                                                                                                             AAB67343;
                                                                                                                                                                                                                                                                                                                                                                                AAB67343 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  by i.v. injection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Stone JL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (STON/) STONE J I
(TERM/) TERMAN D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1993-405418/50
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                                                                                                  DS;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
5; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                   KXXXTXQEXD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cancer in a patient or for the treatment of auto-immune
                                                                                                                                                                                                                                                                                                                                                                                                                                 KKSVTAQELD 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Terman DS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             238 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           given
                                                                                                                                      94US-0189424.
95US-0491746.
89US-0416530.
90US-0466577.
91WO-US00342.
92US-0891718.
93US-0025144.
                                                                                                                     O
                                                                                                                                                                                                                                                                                                                       aureus enterotoxin C3
                                                                                                                                                                                                                       98US-0183437.
                    2
                                                                                                                                                                                                                                                                                                   immune;
                                                                                                                     S
                    16pp; English.
                                                                                                                                                                                                                                                                                                                                                                               peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            in AAR45011-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                69.7%;
                                                                                                                                                                                                                                                                                                    enterotoxin
                                                                                                                                                                                                                                                                                                                                                                                 238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
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Pred.
                                                                                                                                                                                                                                                                                                                                                                                 ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           are
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tumour cell capable of stimulating
                                                                                                                                                                                                                                                                                                                      protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Staphylococcal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ŗ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 238;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           enterotoxins (SEs)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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RESULT 14
ABB76239
ID ABB76239
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-JAN-1994;
19-JUN-1995;
03-OCT-1989;
               The present sequence is the protein sequence of enterotoxin C3 (SEC3) of Staphylococcus aureus. Similarity is shown, in several stretches of sequence, between staphylococcal enterotoxins, streptococcal, pyrogenic exotoxins and staphylococcal exfoliative toxins (see ABB76334-44). In the present invention, synthetic polypeptides useful in tumour therapy and in blocking or destroying autoreactive T and B lymphocyte populations are characterised by substantial structural homology to staphylococcal enterotoxin A and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antitumor immune reactivity in vitro or in vivo contains and expresses an exogenous nucleic acid molecule encoding a superantigen or its active fragment and an exogenous nucleic acid molecule encoding a costimulatory molecule that activates T cells in conjunction with an antigenic stimulus. The invention may be used
                                                                                                                                                                                                                                                                                              Reagent for treating cancer without the need for e.g. radiotherapy, comprises a specific V beta subset of T cells sensitized to a growing tumor and stimulated with superantigens \,
                                                                                                                                                                                                                                                                                                                                                                                                           WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Staphylococcus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Staphylococcus aureus enterotoxin C3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABB76239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      for cancer therapy by stimulating an anticancer immune response in vivo or ex vivo.
                                                                                                                                                                                                                                                    Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Terman DS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (TERM/) TERMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US2002051765-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antitumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Enterotoxin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABB76239 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-JAN-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-JAN-1990
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3 KXXXTXQEXD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
5; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KKSYTAQELD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    238 AA;
                                                                                                                                                                                                                                                    Fig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C3; SEC3; superantigen; antigen;
therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
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95US-0491746.
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90US-0466577.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note= "given as '0'
                                                                                                                                                                                                                                                    17pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             159
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
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Pred.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         specification"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tumour; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 238;
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enterotoxin B,

and to streptococcal pyrogenic exotoxins,

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RESULT 15
AAR13207
  Query Match
Best Local Similarity
Matches 5; Conserv
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Best Local Similarity
Matches 5; Conserv
                                                                                                                                                           polypeptides having structural homology to Staphylococcal exotoxins are claimed, provided the homology includes statistically significant sequence homology, alignment of Cysteine residues and similar hydropathy profiles.

See AAR13203-R13211.
                                                                                                                                                                                                                                                                                        SEC1 was isolated and purified from S.aureus. It can be used for treating cancer, activating cytokine mediators and procoagulant systems, augmenting natural killer cell cytotoxicity, etc. The enterotoxin can be administered intravenously, optionally with ibuprofen to attenuate toxic reaction to SEC1. Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                statistically significant sequence homology and similarity (2 value of Lipman and Pearson algorithm in Monte Carlo analysis exceeding 6) to include alignment of cysteine residues and similar hydropathy profiles. These superantigens are used to treat solid tumours, including their metastases, without radiation, surgery or standard chemotherapeutic agents. A claimed method of human cancer treatment involves contacting haematopoietic cells from a patient with one or more superantigens ex vivo to generate stimulated cells, selecting a specific V beta subset of cells, and reintroducing these cells into the patient to induce an in vivo therapeutic,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Treating cancer with enterotoxin from Staphylococcus aureus - administered by IV injection, having same tumoricidal activity as Staphylococcal protein A without potential toxic reactions
                                                                                                             Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Fig 1; 74pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Terman DS;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-JAN-1990;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Staphylococcus aureus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEC1; cancer treatment;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Staphylococcal enterotoxin C1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15-OCT-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAR13207;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
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                                                                                                               239 AA;
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        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
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                           69.7%;
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50.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        pyrogen; tumouricide.
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Pred. No. 1.4e+02;
""""" tches 5;
        0;
Score 23; DB 12; Length 239;
Pred. No. 1.4e+02;
0; Mismatches 5; Indels
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/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
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/cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/backfiles1.pep:*
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33.481 Million cell updates/sec
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first 45 summaries
  US-08-896-933-6
US-09-314-235-6
US-08-896-933-28
US-09-314-235-28
US-09-314-235-27
US-09-114-776B-14
US-08-896-933-1
US-08-896-933-15
US-08-896-933-15
US-08-896-933-17
US-08-896-933-17
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US-08-896-933-17
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US-08-896-933-17
US-08-888-413A-19
US-08-888-413A-19
US-08-888-207A-381
US-08-886-207A-381
US-08-886-207A-381
US-08-886-933-29
US-08-886-933-29
US-08-886-933-29
US-08-886-933-26
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6 Appli
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34 Appl
             APPLICANT: Terman, David S.
TITLE OF INVENTION: TUMOR KILLING EFFECTS OF ENTEROTOXINS,
TITLE OF INVENTION: SUPERANTIGENS, AND RELATED COMPOUNDS
FILE REFERENCE: 09629/005004
CURRENT APPLICATION NUMBER: US/9/314,235
CURRENT APPLICATION NUMBER: 08/896,933
EARLIER APPLICATION NUMBER: 08/896,933
EARLIER APPLICATION NUMBER: 08/252,978
EARLIER APPLICATION NUMBER: 08/25,978
EARLIER APPLICATION NUMBER: 07/891,718
EARLIER FILING DATE: 1994-06-01
EARLIER FILING DATE: 1992-06-01
EARLIER APPLICATION NUMBER: US91/00342
EARLIER APPLICATION NUMBER: US91/00342
EARLIER FILING DATE: 1991-01-17
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US-09-314-235-6
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US-08-896-933-6
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Matches 5
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SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 6

LENGTH: 17

TYPE: PRT

ORGANISM: Staphylococcus aureas
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APPLICANT: Terman, David S.
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Patent No. 6221351
                                                                                                                                                                                                                            Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/08/896,9
CURRENT FILING DATE: 1997-07-18
EARLIER APPLICATION NUMBER: 08/252,978
EARLIER FILING DATE: 1994-06-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE OF INVENTION: TUMOR KILLING EFFECTS OF ENTEROTOXINS TITLE OF INVENTION: SUPERANTIGENS, AND RELATED COMPOUNDS FILE REFERENCE: 09629/005002
    EARLIER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              l Similarity
5; Conserv
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US-08-446-918A-2
US-08-486-918-6-2
US-08-486-806-2
US-09-144-776B-8
US-09-144-776B-8
US-09-144-776B-8
US-09-144-776B-9
US-09-144-776B-9
US-09-144-776B-9
US-09-144-776B-9
US-09-144-776B-9
US-09-144-776B-9
US-09-144-775C-2
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Pred. No. 0.
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US-08-838-413A-20
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                                                        Matches
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Best Local :
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                              TELEFAX: (212)751-6849 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: FastSEQ for Windows Version 3.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EARLIER FILING DATE: 1990-01-17
EARLIER APPLICATION NUMBER: 07/
EARLIER FILING DATE: 1989-10-03
                                                                                                                          TYPE: AMINO ACID
STRANDEDNESS: UNKNOWN
TOPOLOGY: UNKNOWN
MOLECULE TYPE: PEPTII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tent No.
                                                                                                                                                                                                                                      REFERENCE/DOCKET NUMBER: 20
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212)758-4800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ENGTH: 17
                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: MORRY, MARY J.
                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION: 536 PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: PE
TITLE OF INVENTION: RE
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC COMPATIBLE OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: WORDPERFECT 5.1
                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US/0 FILING DATE: 07-APR-1997
                                                                     Local
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                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                            CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MEDIUM TYPE: FLOPPY DISK
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                                                       Similarity 5; Conserv
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KKSVTAQELD 10
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NUMBER: 07/416,530
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Pred. No.
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Pred. No.
                                                       Mismatches
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RESULT 6

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SOFTWARE: Fast
SEQ ID NO 28
FRIGHH: 238
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                                                                               Query Match
Best Local
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                                                                Matches
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                                                                                                                                                         LENGTH: 23
TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT FILING DATE: 1997-07-18
EARLIER APPLICATION NUMBER: 08/252,978
EARLIER FILING DATE: 1994-06-02
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150 KKSVTAQELD 159
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                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US91/00342
                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 07/891,718 FILING DATE: 1992-06-01
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APPLICATION NUMBER: 08/252,978
FILING DATE: 1994-06-02
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                               3 KXXXTXQEXD 12
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                                                              Conservative
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US-08-896-933-27

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GENERAL INFORMATION:

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RESULT 8
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; TYPE: PRT
; ORGANIEM: Staphylococcus aureas
US-08-896-933-27
                                                                                                                                                                                                                                              ; ORGANISM: Staphylococcus aureas
US-09-314-235-27
Sequence 14, Application US/09144776B Patent No. 6399332
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SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 27
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Best Local S
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Best Local Similarity 50.0%;
Matches 5; Conservative
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                                                                                                                                                                                                                                                                                                     SEQ ID NO 27
LENGTH: 239
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CURRENT FILING DATE: 1997-07-18
EARLIER APPLICATION NUMBER: 08/252,978
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: TUMOR KILLING EFFECTS OF ENTEROTOXINS, TITLE OF INVENTION: SUPERANTIGENS, AND RELATED COMPOUNDS FILE REFERENCE: 09629/005002
                                                                                                                                                                                                                                                                                                                                       SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  PARLIER
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                                                                                                                                                                                                                                                                                      TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ARLIER APPLICATION NUMBER: 08/252,978
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        'ILE REFERENCE: 09629/005004
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mes 5; Conserv
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6221.
مهر
                                                                                                        151 KKSVTAQELD 160
                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 07/416,530 FILING DATE: 1989-10-03
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                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US91/00342 FILING DATE: 1991-01-17 APPLICATION NUMBER: 07/466,577
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 07/891,718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/09/314,235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 08/896,933 FILING DATE: 1997-07-18
                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
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                                                                                                                                                                              Conservative
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Pred. No.
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RESULT 9
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Best Local Similarity
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MOLECULE TYPE: Peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 14:
US-09-144-776B-14
                                                                                                                                                                                                                                                                                                                               US-08-896-933-4
                                                       EARLIER FILING DATE: 1994-06-02
NUMBER OF SEQ ID NOS: 34
SOFTWARE: PastSEQ for Windows Version 3.0
SEQ ID NO 4
                                                                                                                                                                                                      GENERAL INFORMATION:

APPLICANT: Terman, David S.

TITLE OF INVENTION: TUMOR KILLING EFFECTS OF ENTEROTOXING,

TITLE OF INVENTION: SUPERANTIGENS, AND RELATED COMPOUNDS
                                                                                                                                                                                                                                                                                        Sequence 4, Appli
Patent No. 622135
                                                                                                                                                  CURRENT APPLICATION NUMBER: US/08/896,933
CURRENT FILING DATE: 1997-07-18
                                                                                                                                     EARLIER APPLICATION NUMBER: 08/252,978
                                                                                                                                                                                            FILE REFERENCE: 09629/005002
ORGANISM: Staphylococcus aureas
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INFORMATION FOR SEQ ID NO:
                                         LENGTH:
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FILING DATE: <Unknown>
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Charles H. Harris
REGISTRATION NUMBER: 34,616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Microsoft CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
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STREET: US Army MRMC -504 Scott Street
MCMR-JA (Charles H. Harris-Patent
                                                                                                                                                                                                                                                                                                         Application US/08896933
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STRANDEDNESS: Un
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OPERATING SYSTEM: Macintosh
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Pred. No. 19;
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US-08-896-933-14
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Matches
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APPLICANT: Terman, David S.
TITLE OF INVENTION: TUMOR KILLING EFFECTS OF ENTEROTOXINS,
TITLE OF INVENTION: SUPERANTIGENS, AND RELATED COMPOUNDS
FILE REFERENCE: 09629/005002
CURRENT APPLICATION NUMBER: US/08/896,933
CURRENT FILING DATE: 1997-07-18
EARLIER APPLICATION NUMBER: 08/252,978
EARLIER FILING DATE: 1994-06-02
NUMBER OF SEC ID NOS: 34
                                                                      Matches
                                                                                    Query Match
Best Local (
                                                                                                                                                                                                                                            SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 14 LENGTH: 17
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Best Local Similarity
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SEQ ID NO 12
LENGTH: 17
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Best Local
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Patent No. 6221351
                                                                                                                                                                                                                                                                                                           APPLICANT: Terman, David S.
TITLE OF INVENTION: TUMOR KILLING EFFECTS OF ENTEROTOXINS,
TITLE OF INVENTION: SUPERANTIGENS, AND RELATED COMPOUNDS
FILE REFERENCE: 09629/005002
CURRENT APPLICATION NUMBER: US/08/896,933
CURRENT FILING DATE: 1997-07-18
EARLIER APPLICATION NUMBER: 08/252,978
EARLIER FILING DATE: 1994-06-02
                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS:
                                                                                                                                                     OTHER INFORMATION: Consensus sequences derived from staphylococcus OTHER INFORMATION: aureus and streptococcus pyogenes polypeptides
                                                                                                                                                                                                           ORGANISM: Other
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                                                           66.7%;
Local Similarity 50.0%;
es 5; Conservation
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KKNVTAQELD 10
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Pred. No.
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Pred. No.
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APPLICANT:

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Best Local Similarity
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                                                                      RESULT 14
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Sequence 17, Application US/08896933 Patent No. 6221351 GENERAL INFORMATION:
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Best Local Similarity 50.0
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SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 15
LENGTH: 17
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: TUMOR KILLING EFFECTS OF ENTEROTOXINS, TITLE OF INVENTION: SUPERANTIGENS, AND RELATED COMPOUNDS FILE REFERENCE: 09629/005002 CURRENT APPLICATION NUMBER: US/08/896,933 CURRENT FILING DATE: 1997-07-18 EARLIER APPLICATION NUMBER: 08/252,978
                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 34
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EARLIER APPLICATION NUMBER: 08/252,978
EARLIER FILING DATE: 1994-06-02
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 EARLIER FILING DATE: 1994-06-02
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OTHER INFORMATION:
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                                                                                                                                                                                                                                                                                                                        FEATURE:
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                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 17
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Mo. 6221351
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o. 622135
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                                                                                                                            KKNVTAQELD 10
                                                                                                                                                              KXXXTXQEXD 12
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50.0%;
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Pred. No.
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Pred. No. 1.7;
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TITLE OF INVENTION: TUMOR KILLING EFFECTS OF ENTEROTOXINS,
TITLE OF INVENTION: SUPERANTIGENS, AND RELATED COMPOUNDS
FILE REFERENCE: 09629/005004
CURRENT APPLICATION NUMBER: US/09/314,235
CURRENT FILING DATE: 1999-05-18
EARLIER APPLICATION NUMBER: 08/896,933
EARLIER APPLICATION NUMBER: 08/896,933
EARLIER FILING DATE: 1997-07-18
EARLIER FILING DATE: 1997-07-18
EARLIER APPLICATION NUMBER: 07/891,718
EARLIER APPLICATION NUMBER: US/1/0342
EARLIER APPLICATION NUMBER: US/1/0342
EARLIER APPLICATION NUMBER: US/1/0342
EARLIER APPLICATION NUMBER: 07/466,577
EARLIER APPLICATION NUMBER: 07/466,577
EARLIER FILING DATE: 1990-01-17
EARLIER APPLICATION NUMBER: 07/416,530
EARLIER APPLICATION NUMBER: 07/416,530
EARLIER APPLICATION NUMBER: 07/416,530
EARLIER APPLICATION NUMBER: 07/416,530
Search completed: June 5, 2003, 15:32:44
Job time: 11.5455 secs
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SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 4
LENGTH: 17
TYPE: PRT
ORGANISM: Staphylococcus aureas
US-09-314-235-4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: TUMOR KILLING EFFECTS OF ENTEROTOXINS, TITLE OF INVENTION: SUPERANTIGENS, AND RELATED COMPOUNDS FILE REFERENCE: 09629/005002
CURRENT APPLICATION NUMBER: US/08/896,933
CURRENT FILING DATE: 1997-07-18
EARLIER APPLICATION NUMBER: 08/252,978
EARLIER FILING DATE: 1994-06-02
ROMBER OF SEQ ID NOS: 34
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 17
THEORY OF THE TOWN O
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Matches
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Patent No. 6338845
GENERAL INFORMATION:
APPLICANT: Terman, David S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ouery Match 66.7%;
Best Local Similarity 50.0%;
Matches 5; Conservative
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ORGANISM: Other
FEATURE:
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les 5; Conserv
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                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                           66.7%; Score 22; DB 4; Length 17; 50.0%; Pred. No. 1.7; tive 0; Mismatches 5; Indels
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Result
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Maximum
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Maximum Match 100%
Listing first 45 summaries
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OM protein -
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       protein search, using sw model
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Match
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                             Published_Applications_
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
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/cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*
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US-09-870-759-12
US-10-002-784A-14
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0 US-09-150-947B-4
0 US-09-150-947B-2

0 US-09-150-947B-6

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0 US-09-150-947B-1

0 US-09-150-947B-7

0 US-09-150-947B-7

0 US-09-150-947B-1

0 US-09-150-947B-1

0 US-09-150-947B-8

US-10-047-260-26

US-10-047-260-26
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US-10-113-809-4
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                                            14, Appl
12, Appl
14, Appl
16, Appl
17, Appl
17, Appl
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18, Appl
18, Appl
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| 5                 | 44                | 43                 | 42                | 41                | 40                | 39                | 38                | 37                | 36                | 35                | 34                | S<br>S              | 32                  | 31                | 30                | 29                | 28                | 27                | 26                | 25                | 24                | 23                | 22                | 21                | 20                |
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| 21                | 21                | 21                 | 21                | 21                | 21                | 21                | 22                | 22                | 22                | 22                | 22                | 22                  | 22                  | 22                | 22                | 22                | 22                | 22                | 22                | 22                | 22                | 22                | 22                | 22                | 22                |
| 63.6              | 63.6              | 63.6               | 63.6              | 63.6              | 63.6              | 63.6              | 66.7              | 66.7              | 66.7              | 66.7              | 66.7              | 66.7                | 66.7                | 66.7              | 66.7              | 66.7              | 66.7              | 66.7              | 66.7              | 66.7              | 66.7              | 66.7              | 66.7              | 66.7              | 66.7              |
| 217               | 203               | 190                | 177               | 177               | 72                | 12                | 922               | 659               | 468               | 350               | 344               | 295                 | 295                 | 266               | 266               | 266               | 266               | . 265             | 265               | 251               | 251               | 251               | 239               | 239               | 239               |
| 9                 | 9                 | ø                  | 10                | 9                 |                   |                   |                   | 9                 | φ                 | 9                 | ø                 | 10                  | 10                  | ø                 | 9                 | 9                 | 9                 | r                 | Н                 | 9                 | œ                 | μ                 | 10                | 9                 | μ                 |
| US-09-900-766-6   | US-09-900-766-5   | US-09-738-626-4637 | US-09-730-617-95  | US-10-092-849-5   | US-10-144-929-189 | US-10-113-809-2   | US-09-879-228-2   | US-10-102-627-74  | US-10-002-784A-27 | US-09-972-473-38  | US-10-201-310-3   | US-09-815-242-13691 | US-09-815-242-13351 | US-10-151-336-8   | US-10-002-784A-8  | US-10-002-784A-6  | US-09-870-759-10  | US-08-882-431-8   | US-08-882-431-6   | US-10-002-784A-16 | US-08-973-391A-13 | US-08-882-431-16  | US-09-150-947B-12 | US-10-002-784A-10 | US-08-882-431-10  |
| Sequence 6, Appli | Sequence 5, Appl1 | Sequence 4637, Ap  | Sequence 95, Appl | Sequence 5, Appli | Sequence 189, App | Sequence 2, Appl1 | Sequence 2, Appli | Sequence 74, Appl | Sequence 27, Appl | Sequence 38, Appl | Sequence 3, Appli | Sequence 13691, A   | Sequence 13351, A   | Sequence 8, Appli | Sequence 8, Appli | Sequence 6, Appl1 | Sequence 10, Appl | Sequence 8, Appli | Sequence 6, Appli | Sequence 16, Appl | Sequence 13, Appl | Sequence 16, Appl | Sequence 12, Appl | Sequence 10, Appl | Sequence 10, Appl |

### ALIGNMENTS

RESULT. 1 US-09-84-761-43487 ; Sequence 43487, Application US/09864761 ; Patent No. US20020048763A1

APPLICANT: Penn, Sharron

<u>.</u>

INFORMATION

FILE REFERENCE: Acomica-X-1
CURRENT APPLICATION NUMBER: US/09/864,761
CURRENT FILING DATE: 2001-05-23
PRIOR APPLICATION NUMBER: US 60/180,312
PRIOR FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: US 60/207,456
PRIOR FILING DATE: 2000-05-26 APPLICANT: PRIOR PRIOR PRIOR APPLICATION NUMBER: PCT/US01/00663 PRIOR FILING DATE: 2001-01-30 PRIOR FILING DATE: 2001-01-30 PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 2000-09 PRIOR APPLICATION NUMBER: US 09/632,366
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: GB 24263.6
PRIOR FILING DATE: 2000-10-04 TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FO PRIOR FILING DATE: APPLICANT: APPLICATION NUMBER: PCT/US01/00667 FILING DATE: 2001-01-30 APPLICATION NUMBER: PCT, FILING DATE: 2001-01-30 APPLICATION NUMBER: PCT/US01/00668 FILING DATE: 2001-01-30 APPLICATION NUMBER: PCT/US01/00665 FILING DATE: 2001-01-30 FILING DATE: FILING DATE: APPLICATION NUMBER: PCT/US01/00669 APPLICATION NUMBER: Hanzel, Rank, David R. Hanzel, David K. DATE: Wensheng NUMBER: PCT/US01/00661 2001-01-30 2001-01-30 2000-09-US 60/236,359 9-27 PCT/US01/00664 PCT/US01/00662

Sequence

PCT/US01/00670

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 Query Match
Best Local
 Matches
 SOFTWARE: Annomax Sequence Listing Engine vers. 1.1 SEQ ID NO 43487 LENGTH: 29
 GENERAL INFORMATION
TELEFAX: (301) 619-77
 NUMBER OF SEQ ID NOS: 49117
 PRIOR APPLICATION NUMBER: US 09/774,203
PRIOR FILING DATE: 2001-01-29
 PRIOR FILING DATE: 2000-06-30
 PRIOR APPLICATION NUMBER:
 ORGANISM: Homo sapiens
 OTHER INFORMATION:
 CURRENT APPLICATION DATA: APPLICATION NUMBER: US
 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macinto:
 TELECOMMUNICATION INFORMATION:
 ATTORNEY/AGENT INFORMATION:
 PRIOR APPLICATION DATA:
 CORRESPONDENCE ADDRESS
 TITLE OF INVENTION: Bacterial Superantigen
 UMBER OF SEQUENCES:
 ADDRESSEE: John Moran
STREET: US Army MRMC
CITY: FORT DETRICK
 NAME: Moran, John REGISTRATION NUMBER: 26,313
 TELEPHONE:
 REFERENCE/DOCKET NUMBER:
 APPLICATION NUMBER:
 CLASSIFICATION:
 FILING DATE:
 SOFTWARE: Microsoft Word 6.0
 APPLICATION NUMBER: US 09/608,408
 INFORMATION:
 INFORMATION:
 INFORMATION:
 10 KALSTGQEID 19
 21702-5012
 Similarity
5; Conserv
 MARYLAND
 Application US/08882431 No. US20030009015A1
 USA
 (301) 619-7714
 Sina Bavari
 Conservative
 Robert G. Ulrich,
 Mark A. Olson
 June 25, 1997
 MAP TO AC006299.1
 EXPRESSED IN PLACENTA, SIGNAL = 0.8 EXPRESSED IN LUNG, SIGNAL = 0.7 EXPRESSED IN BRAIN, SIGNAL = 0.67 EXPRESSED IN BONE MARROW, SIGNAL = 0.7 EXPRESSED IN ADULT LIVER, SIGNAL = 0.66 EST_HUMAN HIT: AV703706.1, EVALUE 6.00e+00
 2001-01-30
 Macintosh 7.5
 69.7%;
50.0%;
 US/08/882,431
 -504 Scott Street MCMR-JA (John Moran-Patent Atty)
 US 60/234,687
 0,
 Score 23;
Pred. No.
 Mismatches
 DB 10;
6.8;
 Length 29;
 Indels
 0;
 Gaps
 0
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 Query Match
Best Local Similarity
""+"ches 5; Conserv?
 US-10-002-784A-14
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 ; ORGANISM: Staphylococcus aureus US-09-870-759-12
 US-09-870-759-12
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 ; OTHER INFORMATION: staphylococcal enterotoxin C-1 mutant US-10-002-784A-14
 RESULT 4
 US-08-882-431-14
 Query Match
Best Local S
Matches 5
 Sequence 14, Application US/10002784A Publication No. US20030036644A1 GENERAL INFORMATION:
 NUMBER OF SEQ ID NOS: 166
SOFTWARE: PatentIn version 3.1
SEQ ID NO 12
LENGTH: 266
 Query Match
Best Local .
 SEQ ID NO 14
 Sequence 12, Application US/09870759 Patent No. US20020177551A1
 Matches
 GENERAL INFORMATION:
 CURRENT FILING DATE: 97-06-25; 98-09-01
 CURRENT APPLICATION NUMBER: US/09/870,759
CURRENT FILING DATE: 2002-01-14
PRIOR APPLICATION NUMBER: US 60/208,128
PRIOR FILING DATE: 2000-05-30
 APPLICANT: Ulrich, Robert G.
TITLE OF INVENTION: Bacterial Superantigen Vaccines
FILE REFERENCE: 003/233/SAP
 NUMBER OF SEQ ID NOS: 40
SOFTWARE: Apple Macintosh Microsoft Word 6.0
 FITLE OF INVENTION:
 APPLICANT:
 FEATURE:
 ORGANISM: Artificial sequence
 LENGTH: 266
TYPE: PRT
 TYPE: PRT
 MOLECULE TYPE:
 TYPE: Amino Acid
STRANDEDNESS: Un
 178 KKSYTAQELD 187
 178 KKSVTAQELD 187
 3 KXXXTXQEXD 12
 3 KXXXTXQEXD 12
 Similarity
5; Conserv
 Similarity 50.05; Conservative
 Conservative
 Unknown
 870759
 Peptide
 David S
 Unknown
 COMPOSITIONS AND METHODS FOR TREATMENT OF NEOPLASTIC DISEASE
 69.7%;
 69.7%;
50.0%;
 50.0%;
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 0;
 Score 23;
Pred. No.
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 Score 23;
 Score 23;
Pred. No.
 Mismatches
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 Length 266;
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 Indels
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GENERAL INFORMATION:

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 US-09-150-947B-4
 RESULT 6
US-09-150-947B-4
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 US-09-150-947B-3
 US-09-150-947B-3
 SEQ ID NO 4
LENGTH: 10
TYPE: PRT
ORGANISM: Staphylococcus aureus
Sequence 1, Application US/10113809 Patent No. US20020177573A1
 SEQ ID NO 3
 GENERAL INFORMATION:
 Patent No. US20020028211A1
 Query Match
Best Local (
 Sequence 4, Application US/09150947B Patent No. US20020028211A1
 Query Match
 GENERAL INFORMATION:
 Matches
 Matches
 TITLE OF INVENTION: BROAD SPECTRUM PYROGENIC EXOTOXINS TITLE OF INVENTION: ANTAGONISTS AND VACCINES FILE REFERENCE: A31067-PCT-USA-8 CURRENT APPLICATION NUMBER: US/09/150,947B CURRENT FILING DATE: 1998-09-10 PRIOR APPLICATION NUMBER: PCT/IL197/00438 PRIOR FILING DATE: 1997-12-30
 TITLE OF INVENTION: BROAD SPECTRUM PYROGENIC TITLE OF INVENTION: ANTAGONISTS AND VACCINES FILE REFERENCE: A31967-PCT-USA-A CURRENT APPLICATION NUMBER: US/09/150,947B CURRENT FILING DATE: 1998-09-10
 NUMBER OF SEQ ID NOS: 12
SOFTWARE: FastSEQ for Windows Version 3.0
 APPLICANT: Kaempfer, Raymond APPLICANT: Arad, Gila
 PRIOR FILING DATE:
NUMBER OF SEQ ID NOS:
 PRIOR FILING DATE:
 PRIOR APPLICATION NUMBER:
 PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1997
 APPLICANT: Arad,
 PRIOR APPLICATION NUMBER
 SOFTWARE:
 APPLICANT:
 ORGANISM: Staphylococcus aureus
 LENGTH: 10
 Local Similarity 50.0
 Local Similarity es 5; Conserv
 3 KXXXTXQEXD 12
 Application US/09150947B
 KKKATVQELD 10
 KKKVTAQELD 10
 KXXXTXQEXD 12
 FastSEQ for Windows Version 3.0
 Kaempfer, Raymond
 Conservative
 Gila
 1996-12-30
 50.0%;
 1996-12-30
 1997-12-30
 66.7%;
50.0%;
 ISRAEL 119938
 PCT/IL97/00438
 ISRAEL 119938
 0;
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Pred. No.
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Pred. No. 4.2;
 Mismatches
 PYROGENIC EXOTOXINS
 DB 10; Length 10
 DB 10;
 5;
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 Length 10
 Indels
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 Gaps
 Gaps
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 US-10-113-809-4
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 RESULT 9
US-09-150-947B-2
 밁
 US-10-113-809-4
 RESULT 8
 ; OTHER INFORMATION: Bacterial Toxin Binding Ligand US-10-113-809-1
 SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 1
 SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 4
 Sequence 4, Application US/10113809 Patent No. US20020177573Al
 GENERAL INFORMATION
 Sequence
 Query Match
Best Local (
 Matches
 Query Match
Best Local
 Sequence 2, Application US/09150947B Patent No. US20020028211A1
 Matches
 GENERAL INFORMATION:
 CURRENT APPLICATION NUMBER: US/10/113,809 CURRENT FILING DATE: 2002-03-29 PRIOR APPLICATION NUMBER: 101 16 042.9-41 PRIOR FILING DATE: 2001-03-30.
 TITLE OF INVENTION: BROAD SPECTRUM PYROGENIC TITLE OF INVENTION: ANTAGONISTS AND VACCINES FILE REFERENCE: A11967-PCT-USA-A CURRENT APPLICATION NUMBER: US/09/150,947B CURRENT FILING DATE: 1998-09-10 PRIOR APPLICATION NUMBER: PCT/IL97/00438 PRIOR FILING DATE: 1997-12-30
 CURRENT APPLICATION NUMBER: US/10/113,809
CURRENT FILING DATE: 2002-03-29
 APPLICANT: Maschke, Hans, E.
TITLE OF INVENTION: EXOTOXIN-LIGAND
 PRIOR APPLICATION NUMBER: 101 16 042.9-41 PRIOR FILING DATE: 2001-03-30
 TITLE OF INVENTION: EXOTO FILE REFERENCE: MBP-011XX
 NUMBER OF SEQ
 FILE REFERENCE: MBP-011XX
 APPLICANT: Kaempfer, Raymond APPLICANT: Arad, Gila
 NUMBER OF SEQ ID NOS:
 APPLICANT: Maschke, Hans, E.
 LENGTH: 12
TYPE: PRT
ORGANISM: Artificial Sequence
PRIOR APPLICATION NUMBER:
 TYPE: PRT
 OTHER INFORMATION: Bacterial Toxin Binding Ligand
 FEATURE:
 ORGANISM: Artificial Sequence
 FEATURE:
 LENGTH:
 12
 3 KKKVTAQELD 12
 3 KXXXTXQEXD 12
 w
 3 KXXXTXQEXD 12
 Similarity
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 Similarity
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 KKKVTAQELD
 ID NOS:
 Conservative
 Conservative
 EXOTOXIN-LIGAND
 50.0%;
 66.7%;
50.0%;
ISRAEL 119938
 0
 Score 22;
Pred. No.
 Score 22; I
Pred. No. 5
 Mismatches
 Mismatches
 DB 9;
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 EXOTOXINS
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 5
 Length 12;
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 Indels
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 Gaps
 Gaps
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; PRIOR FILING DATE: 1996-12-30; NUMBER OF SEQ ID NOS: 12; SOFTWARE: FastSEQ for Windows Ve; SEQ ID NO 2; ELENTH: 12; TYPE: PRT; ORGANISM: Staphylococcus aureus US-09-150-947B-2
 Query Match
Best Local Similarity
""" best 5; Conserve
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 : NAME/KEY: LIPID
: LOCATION: (1)...(1)
: OTHER INFORMATION: N-lauryl cysteine residue
US-09-150-947B-5
 US-09-150-947B-6
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 Query Match
Best Local Similarity 50.v
 Sequence 6, Application US/09150947B Patent No. US20020028211A1
 GENERAL INFORMATION:
 SEQ ID NO 5
LENGTH: 13
 Sequence 5, Application US/09150947B Patent No. US20020028211A1
 TITLE OF INVENTION: BROAD SPECTRUM PYROGENIC EXOTOXINS TITLE OF INVENTION: ANTAGONISTS AND VACCINES FILE REFERENCE: A31967-PCT-USA-A CURRENT APPLICATION NUMBER: US/09/150,947B CURRENT FILING DATE: 1998-09-10
 PRIOR APPLICATION NUMBER: 1997-
 APPLICANT: Kaempfer, Raymond APPLICANT: Arad, Gila
 PRIOR FILING DATE: 1997-12-30
PRIOR APPLICATION NUMBER: ISRA
PRIOR FILING DATE: 1996-12-30
 PRIOR FILING DATE:
 PRIOR APPLICATION NUMBER:
 FILE REFERENCE: A31967-PCT-USA-A
CURRENT APPLICATION NUMBER: US/09/150,947B
CURRENT FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: PCT/IL97/00438
 TITLE OF INVENTION: BROAD SPECTRUM PYROGENIC TITLE OF INVENTION: ANTAGONISTS AND VACCINES
 SOFTWARE:
 NUMBER OF SEQ ID NOS:
 APPLICANT: Kaempfer,
APPLICANT: Arad, Gila
 FEATURE:
 TYPE: PRT
ORGANISM: Staphylococcus
 INFORMATION:
 3 KKKATVQELD 12
 3 KXXXTXQEXD 12
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 KKKVTAQELD 13
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 FastSEQ for Windows Version 3.0
 FastSEQ for Windows Version 3.0
 Kaempfer, Raymond
 Conservative
for Windows Version 3.0
 1996-12-30
 1997-12-30
 66.7%;
50.0%;
 50.0%;
 PCT/IL97/00438
 ISRAEL 119938
 ISRAEL 119938
 0;
 Score 22;
Pred. No.
 Score 22; I
Pred. No. 5
 Mismatches
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 DB 10;
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 Length 12;
 Length 13;
 Indels
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RESULT 13
US-09-150-947B-9
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 ; NAME/KEY: ACETYLATION
; COATION: (1)...(1)
; COPHER INFORMATION: N-acetyl group
; NAME/KEY: MOD_RES
; LOCATION: (13)...(13)
; OTHER INFORMATION: D-alanine
US-09-150-947B-11
 밁
 , NAME/KEY: LIPID
; LOCATION: (1)...(1)
; COTHER INFORMATION: N-lauryl cysteine residue
US-09-150-947B-6
 US-09-150-947B-11
 GENERAL INFORMATION
 Sequence 9, Application US/09150947B Patent No. US20020028211A1
 SOFTWARE:
SEQ ID NO 11
 Matches
 Query Match
Best Local
 Sequence 11, Application UPatent No. US20020028211A1
 SEQ ID NO 6
LENGTH: 13
 GENERAL
 Matches
 Best
 Query Match
 APPLICANT: Kaempfer, Raymond
APPLICANT: Arad, Gila
TITLE OF INVENTION: BROAD SPECTRUM PYROGENIC
TITLE OF INVENTION: ANTAGONISTS AND VACCINES
FILE REFERENCE: A31967-PCT-USA-A
CURRENT APPLICATION NUMBER: US/09/150,947B
CURRENT FILING DATE: 1998-09-10
 PRIOR APPLICATION NUMBER: 1997-12-30
PRIOR FILING DATE: 1996-12-30
NUMBER OF CONTROL 1996-12-30
 TITLE OF INVENTION: BROAD SPECTRUM PYROGENIC EXOTOXINS TITLE OF INVENTION: ANTAGONISTS AND VACCINES FILE REFERENCE: A31967-PCT-USA-A CURRENT APPLICATION NUMBER: US/99/150,947B CURRENT FILING DATE: 1998-09-10
 PRIOR
 PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1997
 APPLICANT:
 TYPE: PRT
 TYPE: PRT ORGANISM:
 FEATURE:
 ORGANISM: Staphylococcus aureus
 FEATURE:
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nes 5; Conserv
 APPLICATION NUMBER:
 INFORMATION:
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 3 KXXXTXQEXD 12
 Similarity
5; Conserv
 KKKATVQELD 12
 KXXXTXQEXD 12
 KKKATVQELD
 Staphylococcus aureus
 FastSEQ for Windows Version 3.0
 Application US/09150947B
 Kaempfer, Raymond
 Conservative
 Conservative
 1998-09-10
1997-12-30
 50.0%;
 50.0%;
 PCT/IL97/00438
 PCT/IL97/00438
 ISRAEL 119938
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 Score 22;
Pred. No.
 Score 22;
Pred. No.
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; LOCATION: (1)...(1)
; NAME/KEY: DISULFID
; LOCATION: (14)...(14)
US-09-150-947B-9
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 RESULT 15
US-09-150-947B-7
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 US-09-150-947B-10
 PRIOR FILLING DATE: 1996-12-30

NUMBER OF SEQ ID NOS: 12

SOFTWARE: FastSEQ for Windows Version 3.0

SEQ ID NO 10

LENGTH: 14

TYPE: PRT

ORGANISM: Staphylococcus aureus
 Query Match 66.7%;
Best Local Similarity 50.0%;
Matches 5; Conservative
 SEQ ID NO 9
LENGTH: 14
TYPE: PRT
ORGANISM: Staphylococcus aureus
 GENERAL INFORMATION:
 Sequence 7, Application US/09150947B Patent No. US20020028211A1
 Sequence 10, Application US/09150947B Patent No. US20020028211A1
 NAME/KEY: MOD_RES
LOCATION: (1)...(1)
OTHER INFORMATION: D-alanine
NAME/KEY: MOD_RES
LOCATION: (14)...(14)
OTHER INFORMATION: D-alanine
 GENERAL INFORMATION:
 Matches
 Query Match
Best Local
APPLICANT: Kaempfer, Raymond APPLICANT: Arad, Gila TITLE OF INVENTION: BROAD SPETITLE OF INVENTION: ANTAGONIST
 APPLICANT:
 TITLE OF INVENTION: BROAD SPECTRUM PYROGENIC EXOTOXINS TITLE OF INVENTION: ANTAGONISTS AND VACCINES FILE REFERENCE: A31967-CCT-USA-A CURRENT APPLICATION NUMBER: US/09/150,947B CURRENT FILING DATE: 1998-09-10 PRIOR APPLICATION NUMBER: PCT/1197/00438 PRIOR FILING DATE: 1997-12-30
 APPLICANT: Kaempfer, Raymond APPLICANT: Arad, Gila
 PRIOR APPLICATION NUMBER: ISRA PRIOR FILING DATE: 1996-12-30 NUMBER OF SEQ ID NOS: 12
 PRIOR APPLICATION NUMBER: ISRAPRIOR FILING DATE: 1996-12-30
 Local Similarity 50.
 4 KKKATVQELD 13
 3 KXXXTXQEXD 12
 4 KKKATVQELD 13
 3 KXXXTXQEXD 12
 FastSEQ for Windows Version 3.0
 BROAD SPECTRUM PYROGENIC EXOTOXINS ANTAGONISTS AND VACCINES
 жж: PCT/IL97/00438
1997-12-30
 66.7%;
50.0%;
 ISRAEL 119938
 ISRAEL 119938
 0;
 Score 22;
Pred. No.
 Score 22; I
Pred. No. 6;
 Mismatches
 Mismatches
 DB 10;
 DB 10;
 5
 Length 14;
 Length 14;
 Indels
 Indels
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 0;
 Gaps
 Gaps
 0;
 0
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; SOFTWARE: FastSEQ for Windows '; SEQ ID NO 7; LENGTH: 16; TYPE: PRT; ORGANISM: Staphylococcus aureus US-09-150-947B-7
Search completed: June 5, 2003, 15:49:05 Job time: 14.5455 secs
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 Query Match
Best Local Similarity 50.0
Matches 5; Conservative
 CURRENT APPLICATION NUMBER: US/09/CURRENT APPLICATION NUMBER: US/09/CURRENT FILING DATE: 1998-09-10 PRIOR APPLICATION NUMBER: PCT/IL PRIOR FILING DATE: 1997-12-30 PRIOR APPLICATION NUMBER: PCT/IL PRIOR FILING DATE: 1997-12-30
 PRIOR APPLICATION NUMBER: ISRAEL 119938 PRIOR FILING DATE: 1996-12-30
 NUMBER OF SEQ ID NOS:
 3 KKKATVQELD 12
 3 KXXXTXQEXD 12
 FastSEQ for Windows Version 3.0
 50.0%;
 PCT/IL97/00438
 US/09/150,947B
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 Score 22; L
Pred. No. 6.
 Mismatches
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 Length 16;
 Indels
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```
GenCore version 5.1.6

Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: June 5, 2003, 15:24:01; Search time 11.8182 Seconds (without alignments)
97.613 Million cell updates/sec

Title: US-09-150-947F-16
Perfect score: 33
Sequence: 1 XXKXXXXXQEXD 12

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues

Total number of hits satisfying chosen parameters: 283224
Minimum DB seq length: 0
Maximum DB seq length: 2000000000
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR\_73:\*

pir1: \* pir3: \* pir4: \*

#### SUMMARIES

| 29                 | 28                 | 27                 | 26                 | 25    | 24     | 23                 | 22                 | 21                 | 20     | 19     | 18                 | 17     | 16                 | 15                | 14     | 13                 | 12                | 11                 | 10    | 9                  | 8                 | 7      | О      | υı                 | 4                  | w                  | N                  | ь                  | Result      |
|--------------------|--------------------|--------------------|--------------------|-------|--------|--------------------|--------------------|--------------------|--------|--------|--------------------|--------|--------------------|-------------------|--------|--------------------|-------------------|--------------------|-------|--------------------|-------------------|--------|--------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------|
| 22                 | 22                 | 22                 | 22                 | 22    | 22     | 22                 | 22                 | 22                 | 22     | 22     | 22                 | 22     | 22                 | 22                | 22     | 23                 | 23                | 23                 | 23    | 23                 | 23                | 23     | 23     | 23                 | 24                 | 24                 | 24                 | 24                 | Score       |
| 66./               | 66.7               | 66.7               | 66.7               | 66.7  |        | 66.7               |                    | 66.7               |        |        | 66.7               | 66.7   | 66.7               | 66.7              | 66.7   |                    |                   | 69.7               |       | 69.7               | 69.7              | 69.7   | 69.7   | 69.7               | 72.7               | 72.7               | 72.7               | 72.7               | Query       |
| 295                | 266                | 260                | 258                | 251   | 251    | 247                | 242                | 240                | 239    | 236    | 236                | 236    | 184                | 136               | 102    | 3212               | 586               | 572                | 568   | 566                | 565               | 266    | 266    | 266                | 604                | 603                | 602                | 549                | Length      |
| K                  | س                  | N                  | N                  | ۳     | ب      | N                  | N                  | N                  | N      | N      | N                  | N      | N                  | N                 | N      | N                  | ш                 | N                  | ш     | N                  | N                 | N      | N      | <u>ب</u>           | _                  | _                  | -                  | N                  | DB          |
| 701560             | ENSAB6             | E89969             | <b>В</b> 3668      | QQECF | S29659 | T22535             | C89969             | G89991             | D89969 | S18783 | S18786             | S18789 | F86681             | A89969            | S74843 | T24692             | QRXLE             | E98225             | R32R1 | AB3061             | A87694            | S11885 | A60114 | ENSAC1             | RRNZP4             | RRNZP5             | RRNZP3             | E86337             | ID          |
| nypotnetical prote | enterotoxin B prec | enterotoxin SeO [i | enterotoxin SeN [1 | Ħ     |        | hypothetical prote | extracellular ente | extracellular ente | Z      | Þ      | exotoxin type A pr | A pr   | prophage pil prote | enterotoxin YENT2 |        | hypothetical prote | estrogen receptor | 30S ribosomal prot |       | 30S ribosomal prot | ribosomal protein |        |        | enterotoxin C-1 pr | polymerase-associa | polymerase-associa | polymerase-associa | hypothetical prote | Description |

A;Gene: P C;Superfamily: parainfluenza virus polymerase-associated nucleocapsid phosphoprotein

C; Genetics:

| 44                                       | 41<br>43                                                 | 4<br>9<br>9<br>9<br>9<br>9                                     | 35<br>36<br>37                                                 | ωωω<br>ωω2                                               | 30<br>31                                 |
|------------------------------------------|----------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------|------------------------------------------|
| 22                                       | 222                                                      | 222                                                            | 22<br>22<br>22                                                 | 22<br>22<br>22                                           | 22                                       |
| 66.7<br>66.7                             | 66.7<br>66.7                                             | 66.7<br>66.7                                                   | 66.7<br>66.7                                                   | 66.7<br>66.7                                             | 66.7<br>66.7                             |
| 1327<br>1738                             | 1146<br>1200<br>1314                                     | 986<br>922<br>946                                              | 523<br>672<br>835                                              | 333<br>356<br>520                                        | 295<br>332                               |
| NN                                       | 222                                                      | 222                                                            | N N N                                                          | N N N                                                    | <b>12</b>                                |
| D70759<br>T14867                         | H96796<br>S77524<br>A85176                               | T39229<br>I37292<br>A84133                                     | F97865<br>F71424<br>T05259                                     | JC5787<br>T38408<br>G71647                               | F97975<br>DEBYG2                         |
| probable otsB prot<br>interaptin - slime | hypothetical prote chromosome segrega hypothetical prote | hypothetical prote<br>DNA ligase (ATP) (<br>hypothetical prote | hypothetical prote<br>hypothetical prote<br>probable disease r | ribonuclease H (EC hypothetical prote hypothetical prote | hypothetical prote<br>glyceraldehyde-3-p |

#### ALIGNMENTS

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ٠.                                                                                                                                                      |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                         |
| RESULT'2  RRNZP3  polymerase-associated nucleocapsid phosphoprotein - parainfluenza virus type 3 (strai C:Species: parainfluenza virus type 3  A:Note: host Homo sapiens (man) C:Date: 31-Mar-1988 #sequence_revision 31-Mar-1988 #text_change 24-Jul-1997 C:Accession: A27010 R:Spriggs, M.K.; Collins, P.L. J. Gen. Virol. 67, 2705-2719, 1986 A:Title: Sequence analysis of the P and C protein genes of human parainfluenza virus A:Reterence number: A92793; MUID:87085488; PMID:3025346 A:Accession: A27010 A:Molecule type: mRNA A:Residues: 1-602 <spr> C:Comment: This protein may be a component of the active polymerase. C:Genetics:</spr> | Query Match 72.7%; Score 24; DB 2; Length 549; Best Local Similarity 50.0%; Pred. No. 62; Matches 5; Conservative 0; Mismatches 5; Indels 0; Gaps 0; Qy 3 KXXXTXQEXD 12 Db 27 KISTTGQETD 36 | A;Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, E.; Kim, C.A.; Li, J.H.; Li, Y.; Lin, X.X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Maitl, R.; Marzia Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.  A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallo Ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.  A;Title: Sequence and analysis of chromosome l of the plant Arabidopsis.  A;Reference number: A86141; MUID:21016719; PMID:11130712  A;Accession: E86337  A;Molecule type: DNA A;Residues: 1-549 <sto- 1<="" a;cross-references:="" a;map="" c;genetics:="" gb:ae005172;="" gspdb:gn00141="" nid:99558589;="" pidn:aaf88152.1;="" position:="" td=""><td>RESULT 1  B86337 C;Accession: E86337 R;Theologis, A.; Cohng, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar, Ansure 408, B16-820, 2010</td></sto-> | RESULT 1  B86337 C;Accession: E86337 R;Theologis, A.; Cohng, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar, Ansure 408, B16-820, 2010 |

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A;Title: Messenger RNA encoding the phosphoprotein (P) gene of human A;Reference number: A94343; MUID:86291173; PMID:3016995 A;Accession: A24189
 Ş
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 A;Cross-references: GB:M14890
R;Luk, D.; Sanchez, A.; Baner
Virology 153, 318-325, 1986
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C; Date: 31-Mar-1988 #sequence_r
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 C; Keywords:
 R;Gallinski, M.S.; Mink, M.A.; Lambert, D.M.; Wechsler, S.L.; Pons, M.W. Virology 155, 46-60, 1986
A;Title: Molecular cloning and sequence analysis of the human parainfluenza A;Reference number: A94348; MUID:87044104; PMID:3022477
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RRNZP5
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 S
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 polymerase-associated nucleocapsid phosphoprotein (version
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Virology 156, 193–194, 1987
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 ;Date: 30-Jun-1988 #sequence_revision 30-Jun-1988 #text_change 24-Jul-1997
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 parainfluenza virus
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C;Species: Staphylococcus aures
C;Date: 10-Nov-1992 #sequence_revision
C;Accession: A60114; B60114; A33866
R;Bohach, G.A.; Schlevert, P.M.
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 A; Title: Nucleotide sequence
A; Reference number: A33866; M
A; Accession: A33866
 R;Couch, J.L.; Betley, M.J. J. Bacteriol. 171, 4507-4510,
 A; Molecule type: protein A; Residues: 28-66 < BOH2>
 A; Molecule type: I
A; Residues: 1-266
 Infect. Immun. 57, 2249-2252, 1989
A; Title: Conservation of the biologically active portions
A; Reference number: A60114; MUID:89277549; PMID:2543637
 enterotoxin C-2 precursor - Staphylococcus aureus N; Alternate names: enterotoxin C-3 precursor
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 R;Schmidt, J.J.; Spero, L.
J. Biol. Chem. 258, 6300-630
A;Title: The complete amino
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 A;Cross-references:
 A; Accession: B60114
 A; Status: not compared with
 A; Accession: A60114
 RESULT 6
 A;Gene: entCl
 A; Molecule type: protein
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 Genetics:
 Accession: A01816
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AB3061
30S ribosomal protein S1
C:Species: Agrobacterium
 enterotoxin C3 - Staphylococcus aureus C;Species: Staphylococcus aureus C;Species: Staphylococcus aureus C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 16-Jul-1999 C;Accession: S11885 C - Rohach. G.A.
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E;28-266/Product: enterotoxin C-2 #status predict
 B.; Laub, M.T.; DeBoy, R.T.; Dodson, R.J.; Durkin, A.S.; Gwinn, M.L.; n, J.; Ermolaeva, M.; White, O.; Salzberg, S.L.; Shapiro, L.; Venter, Proc. Natl. Acad. Sci. U.S.A. 98, 4136-4141, 2001
A; Title: Complete Genome Sequence of Caulobacter crescentus.
 R;Hovde, C.J.; Hackett, S.P.; Bohach, G.A.
Mol. Gen. Genet. 220, 329-333, 1990
A;Title: Nucleotide sequence of the staphylococcal enterotoxin
A;Reference number: S11885; MUID:90220508; PMID:2325627
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 A; Molecule type: DNA
A; Residues: 1-565 <STO>
 A; Reference number: A87249; MUID:21173698; PMID:11259647
A; Accession: A87694
 R; Nierman, W.C.; Feldbl
B.; Laub, M.T.; DeBoy,
 ribosomal protein SI [imported] - Caulobacter crescentus C;Species: Caulobacter crescentus
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 A;Cross-references: GB:AE005673; NID:g13425331; PIDN:AAK25549.1;
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 178 KKSVTAQELD 187
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 Feldblyum, T.V.; Paulsen, I.T.; Nelson, K.E.; Eisen, J.; Heidelberg, J. DeBoy, R.T.; Dodson, R.J.; Durkin, A.S.; Gwinn, M.L.; Haft, D.H.; Kolor, M.; White, O.; Salzberg, S.L.; Shapiro, L.; Venter, J.C.; Fraser, C.M.
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 335
 69.7%;
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 Score 23; DB 2; pred. No. 1.2e+02;
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 PID:g46571
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 A.; Liu, F.; Wollam, C.; Allinger, M.; Doughty, D.; Science 294, 2323-2328, 2001
A;Title: Genome Common Com
 A; Title: Genome Sequence of the Plant Pathogen and Biotechnology Agent Agrobacterium A; Reference number: A97359; PMID:11743194 A; Accession: E98225
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G;Superfamily: Escherichia coll ribosomal protein S1
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C; Genet1
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 R;Schnier, J.; Thamm, S.; Lurz, R.; Hussain, A.; Faist, G.; DODIINSKI, B.
Nucleic Acids Res. 16, 3075-3089, 1988
A;Title: Cloning and characterization of a gene from Rhizobium melilotii 2011 coding
A;Reference number: S01055; MUID:88217521; PMID:3368316
 ribosomal protein S1 - Rhizobium meliloti
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 ; Karp, P.; Romero, P.; Zhang, S. Science 294, 2317-2323, 2001 A; Authors: Yoo, H.; Tao, Y.; Biddle,
 R;Wood, D.W.; Setubal, J.C.; Kaul, R.; Monks, D.; Chen, L.; Woo erage, G.; Gillet, W.; Grant, C.; Guenthner, D.; Kutyavin, T.;
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Blanchard, M.; Qurollo, Scott, C.; Lappas, C.;

Markelz,

Goldm

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C;Comment: The steroid hormones and their receptors are involved in the regulation of eu C;Comment: In the absence of ligand, steroid hormone receptors are thought to be weakly omplex appears to recognize discrete DNA sequences upstream of transcriptional start sit C;Superfamily: estrogen receptor; erbA transforming protein homology C;Keywords: DNA binding; nucleus; phosphoprotein; steroid binding; steroid hormone receptor; p.1-174/Domain: amino-terminal cNH2>
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T24692
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 submitted to the EMBL Data Library, A; Reference number: Z19925 A; Accession: T24692
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 F;251-266/Region: nuclear location signal predicted <STB>
F;292-544/Domain: steroid binding #status predicted <F;180,183,197,200/Binding site: zinc (Cys) #status predicted F;180,183,197,200/Binding site: zinc (Cys) #status predicted F;216,222,232,235/Binding site: zinc (Cys) #status predicted
 R;Weller, I.J.; Lew, D.; Shapiro, D.J.
Mol. Endocrinol. 1, 355-362, 1987
A;Title: The Xenopus laevis estrogen receptor: sequence homology with
A;Reference number: A40907; MUID:90331927; PMID:3274894
 estrogen receptor - African clawed frog
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R;Kuroda, M.; Ohta, T.; Uchiyama, I.; Baba, T.; Yuzawa, H.; Kobayashi, I.; ma, A.; Mizutani-Ui, Y.; Kobayashi, N.; Sawano, T.; Inoue, R.; Kaito, C.; C.; Shiba, T.; Hattori, M.; Ogasawara, N.; Hayashi, H.; Hiramatsu, K.
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C;Date: 10-May-2001 #sequence_revision 10-May-2001 #text_change 22-Oct-2001
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 A;Title: Whole genome sequencing of meticillin-resistant Stapylococcus aureus. A;Reference number: A89758; MUID:21311952; PMID:11418146 A;Accession: A89969
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 C;Accession: S74843
R;Kaneko, T.; Sato, S.; Kotani,
o, K.; Okumura, S.; Shimpo, S.;
DNA Res. 3, 109-136, 1996
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 A;Gene: CESP:T08G11.1
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 A; Experimental
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A26896; I
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 RRNZP5
 RRNZP4
 CAA29260.1;
 BAA00921.1;
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 STANDARD;
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 her pyrogenic to 209:15-20(1987).
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 STAPH_STREP_TOXIN_1;
STAPH_STREP_TOXIN_2;
 PubMed-6189824;
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precursor (SEC1).
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 InterPro; IPR001961; Stap/Strep_toxin. Pfam; PF01123; Stap_Strp_toxin; 1. Pfam; PF02876; Stap_Strp_tox_C; 1. PRINTS; PR00279; BACTRLTOXIN.
 Schad E.M., Papageorgiou A.C., Svensson L.A., Acharya K.R. "A structural and functional comparison of staphylococcal enterotoxins A and C2 reveals remarkable similarity and
 enterotoxins.";
 "Crystal structure of the superantigen enterotoxin C2 Staphylococcus aureus reveals a zinc-binding site."; Structure 3:769-779(1995).
 Staphylococcus aureus Bacteria; Firmicutes;
 PIR; A60114;
 COMPARISON OF
 Swaminathan
 X-RAY CRYSTALLOGRAPHY (2.7
 Brehm R.D.,
 MEDLINE=96027099; pubMed=7582894;
Papageorgiou A.C., Acharya K.R.,
 X-RAY CRYSTALLOGRAPHY (2.0 ANGSTROMS).
 enterotoxins C1
 MEDLINE=89277549; PubMed=254
Bohach G.A., Schlievert P.M.
 SEQUENCE FROM
 Enterotoxin
 MEDLINE-97334373;
 "Residues defining V
 MEDLINE-96022987;
 Conservation of the biologically active
 NCBI_TaxID=1280;
 STAPHYLOCOCCAL FOOD SIMILARITY: BELONGS
 DISEASE: STAPHYLOCOCCAL ENTEROTOXINS CAUSE THE
 SUBCELLULAR LOCATION: Secreted
 1STE; 23-DEC-96.
1SE2; 08-MAR-96.
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 Biol. 2:680-686(1995)
 Toxin;
 STRUCTURE
 N.A.,
 and C2.";
57:2249-2252(1989).
 Ã,
 STANDARD;
 Furey W.F. Jr.,
 C-2 precursor
 PubMed=91
 PubMed=7552730;
 PubMed=2543637;
 28, Created)
28, Last sequence update)
41, Last annotation update)
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 Signal;
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 beta specificity
 Bacillales; Staphylococcus
 POISONING SYNDROME.
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3A7AB59A8986853B CRC64;
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 STRAIN-WISO / APCC 700699, and N315;
STRAIN-WISO / APCC 700699, and N315;
Kuroda M., Ohta T., Uchiyama I., Baba T., Yuzawa H., Kobayash Kuroda M., Opta T., Uchiyama I., Baba T., Lian J.-Q., Ito T., Cui L., Oguchi A., Aoki K.-I., Nagai Y., Lian J.-Q., Ito T., Kanamori M., Matsumaru H., Maruyama A., Murakami H., Hosoyama Mizutani-Ui Y., Takahashi N.K., Sawano T., Inoue R.-I., Kaito Sekimizu K., Hirakawa H., Kuhara S., Goto S., Yabuzaki J., Kanehisa M., Yamashita A., Oshima K., Furuya K., Yoshino C., Hattori M., Ogasawara N., Hayashi H., Hiramatsu K.;
"Whole genome sequencing of meticillin-resistant Staphylococc
 DISULFID
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 ETC3_STAAM
P23313;
 X-RAY CRYSTALLOGRAPHY (3.5 ANGSTROMS) OF COMPI
MEDILINE-97064178; PubMed-8906797;
Fields B.A., Malchiodi E.L., Li H., Ysern X.,
Schlievert P.M., Karjalainen K., Mariuzza R.A.
"Crystal structure of a T-cell receptor beta-c
 Staphylococcus aureus (strain Mu50 / ATCC 700699
Staphylococcus aureus (strain N315), and
Staphylococcus aureus.
Bacteria; Firmicutes; Bacillales; Staphylococcus
NCBI_TaxID-158878, 158879, 1280;
 METAL
SEQUENCE
 sequence comparison of enterotoxins.";
 MEDLINE-90220508; PubMed-2325627;
Hovde C.J., Hackett S.P., Bohach G.A.;
"Nucleotide sequence of the staphylococcal enterotoxin
 01-NOV-1991 (Rel. 20) Last sequence up
15-JUN-2002 (Rel. 41) Last annotation in
Enterotoxin type C-3 precursor (SEC3).
ENTC3 OR SAV2009 OR SA1817.
 01-NOV-1991 (Rel.
01-NOV-1991 (Rel.
15-JUN-2002 (Rel.
 STAAM
 METAL
 3D-structure.
SIGNAL
 Nature 384:188-192(1996).
 SEQUENCE FROM N.A.
 aureus
 SEQUENCE FROM N.A.
 CHAIN
 Enterotoxin;
 PROSITE; PS00278; STAPH_STREP_TOXIN_2; 1.
 Lancet
 SUBCELLULAR LOCATION: Secreted.

DISEASE: STAPHYLOCOCCAL ENTEROTOXINS CAUSE THE INTOXICAT STAPHYLOCOCCAL FOOD POISONING SYNDROME.

SIMILARITY: BELONGS TO THE STAPHYLOCOCCAL/STREPTOCOCCAL
 178
 357:1225-1240(2001).
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 KKSVTAQELD 187
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 Superantigen; Metal-binding; Zinc;
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 Capela.D., Barloy-Hubler F., Gouzy J., Bothe G., Ampe F., Batut J.,
A Bolstard P., Becker A., Boutry M., Cadleu E., Dreano S., Gloux S.,
A Godrie T., Goffeau A., Kahn D., Kiss E., Lelaure V., Masuy D.,
A Pohl T., Portetelle D., Puehler A., Purnelle B., Ramsperger U.,
A Renard C., Thebault P., Vandenbol M., Weidner S., Galibert F.;

"Analysis of the chromosome sequence of the legume symbiont
Sinorhizoblum meliloti strain 1021.";

"Foc. Natl. Acad. Sci. U.S.A. 98:9977-9882(2001).

"Proc. Natl. Acad. Sci. U.S.A. 98:9877-9882(2001).

"INITIATION POINT. IT IS NEEDED TO TRANSLATE MRNA WITH A SHORT
C SHINE-DALGARNO (SD) PURNME-RICH SEQUENCE (BY SIMILARITY).

"SIMILARITY: BELONGS TO THE SIP FAMILY OF RIBOSOMAL PROTEINS.

"C -!- SIMILARITY: CONTAINS 6 S1 MOTIF DOMAINS.
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InterPro; IPR001961; Stap/Strep_toxin, 1.

Pfam; PF01123; Stap_Strp_toxin; 1.

Pfam; PF02876; Stap_Strp_tox_C; 1.

PRINTS; PR00279; BACTRLTOXIN.
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 Nucleic
[2]
 Rhizobium meliloti (Sinorhizobium meliloti). Bacteria; Proteobacteria; alpha subdivision; Rhizobiaceae; Sinorhizobium.
 01-JAN-1990 (Rel. 13, Creat
30-MAY-2000 (Rel. 39, Last
15-JUN-2002 (Rel. 41, Last
30s ribosomal protein S1
RPSA OR R00255 OR SMC00335.
 MEDLINE=21396507; PubMed=11481430;
 STRAIN-1021;
 SEQUENCE FROM N.A.
 coding
 Schnier J.,
 MEDLINE-88217521;
 STRAIN-RCR2011
 SEQUENCE FROM N.A.
 SEQUENCE
 Complete
 Enterotoxin; Toxin; Signal; Superantigen; 3D-structure;
 PROSITE; PS00277; STAPH_STREP_TOXIN_1; PROSITE; PS00278; STAPH_STREP_TOXIN_2;
 EMBL; X51661; CAA35972.1; PIR; S11885; S11885.
 "Cloning and characterization of a gene coding for ribosomal protein S1."; Nucleic Acids Res. 16:3075-3089(1988).
 Dobrinski B.;
 NCBI_TaxID=382;
 European Bioinformatics Institute.
 178
 AP003364;
AP003135;
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 . Similarity
5; Conserv
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266 AA;
 17521; PubMed-3368316; Thamm S., Lurz R., Hu
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 BAB58171.1;
BAB43097.1;
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 "The Xenopus laevis estrogen receptor: sequence homology with number and avian receptors and identification of multiple estrogen receptor and avian receptors and identification of multiple estrogen receptor messenger ribonucleic acids.";
Moi. Endocrinol. 1:355-362(1987).

11 THE STEROID HORNORS AND THEIR RECEPTORS ARE INVOLVED IN THE REGULATION OF EUKARYOTIC GENE EXPRESSION AND AFFECT CELLULAR PROLIFERATION AND DIFFERENTIATION IN TARGET TISSUES.

CELLULAR PROLIFERATION AND DIFFERENTIATION IN TARGET TISSUES.
 CONFLICT
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CONFLICT
-1- SUBCELLULAR LOCATION: NUCLEAR.
-1- DOMAIN: COMPOSED OF THREE DOMAINS: A MODULATING N-TERMINAL DOMAIN,
A DNA-BINDING DOMAIN AND A C-TERMINAL STEROID-BINDING DOMAIN.
-1- SIMILARITY: BELONGS TO THE NUCLEAR HORMONE RECEPTOR FAMILY.
 TIGRFAMS; TIGR00717; rpsA; 1. PROSITE; PS50126; S1; 6.
 Weiler I.J., Lew D., Shapiro D.J.;
 SEQUENCE FROM N.A. MEDLINE-90331927;
 Eukaryota; Metazoa; Chordata;
Amphibia; Batrachia; Anura; M
 ESTROGEN RECEPTOR (EF
 XENLA
 PRINTS;
 Pfam; PF00575; S1;
 EMBL; X07528; CAA30404.1; -.
 or send an email to license@isb-sib.ch)
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 NCBI_TaxID-8355;
 Xenopus laevis (African clawed frog).
 P81559;
15-JUL-1999
 ESR1_XENLA
 SEQUENCE
 DOMAIN
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 InterPro; IPR003029;
 InterPro;
 HSSP;
 EMBL;
 Kenopodinae;
 15-JUL-1999 (Rel.
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15-JUL-1999 (Rel.
 Lbosomal
 SUBUNIT: BINDS DNA AS A HOMODIMER. BETA (BY SIMILARITY). SUBCELLULAR LOCATION: Nuclear.
 S01055; R3ZR1.
 326 KILSTSQEVD
 P05055;
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SM00316; S1; 6.
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PRODOM; PD000035; Znf_C4steroid; 1
SMART; SM00430; HOLI; 1.
SMART; SM00399; ZnF C4
 P03856; P08969;
21-JUL-1986 (Rel. 01, C
21-JUL-1986 (Rel. 01, I
15-JUN-2002 (Rel. 41, I
 SEQUENCE FROM N.A.

Eichenlaub R.;

"F plasmid DNA complete mini-F region (F coordinates 40.301F 49.869F).";
 DNA_BIND
ZN_FING
ZN_FING
DOMAIN
DOMAIN
Submitted (AUG-1986) to the EMBL/GenBank/DDBJ databases [3]
 "Nine unique repeating sequences in a region essential f replication and incompatibility of the mini-F plasmid."; Gene 15:257-271(1981).
 SEQUENCE FROM N.A.
MEDLINE-82051318; PubMed-7
Murotsu T., Matsubara K.,
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InterPro;
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 the European Bioinformatics Institute. The by non-profit institutions as long modified and this statement is not removed. entitles requires a license agreement (See or send an email to license@isb-sib.ch).
 Escherichia
Plasmid F.
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 Replication
 SEQUENCE
 EMBL; L20735;
HSSP; P03372;
 NCBI_TaxID=562;
 Escherichia
 InterPro; IPR001292;
InterPro; IPR001723;
InterPro; IPR001628;
 Bacteria;
 DOMAIN
 Receptor;
 PROSITE; PS00031; NUCLEAR_RECEPTOR;
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 PubMed=7028572;
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 Znf_C4steroid
 Hormone_rec_lig
 Stdhrmn_receptor.
 Oestrgn_receptor.
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n protein (REP pr
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 Sugisaki H.,
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 gamma subdivision; Enterobacteriaceae;
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 Score 23;
Pred. No.
 NUCLEAR RECEPTOR-TYPE.
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 MODULATING
 (REP protein)
 OEDC77EB0D6F08BF CRC64;
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 DNA-binding; Nuclear protein;
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PO8095;
01-AUG-1988 (Rel. 08, Created)
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15-JUN-2002 (Rel. 41, Last ann
 EMBL;
 EMBL;
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 Disque-Kochem C., Seidel U., Helsberg M., Eichenlaub "The repeated sequences (inch) preceding the protein plasmid mini-F are essential for replication.";
 Shimizu H., Saitoh Y., Suda Y., Uehara K., Sampei G., Mizobuchi "Complete nucleotide sequence of the F plasmid: its implications organization and diversification of plasmid genomes.";
Streptococcus
Streptococcus
 SPEA OR SPYM18_0393.
 STRPY
 PIR;
 MEDLINE-87141188; PubMed-3029390;
Mori H., Kondo A., Ohshima A., Ogura T.,
"Structure and function of the F plasmid
 MEDLINE-86174346; PubMed-30079; Disque-Kochem C., Seidel U., Ho "The repeated sequences (incB)
 Tolun A., Helinski D.R.; "Direct repeats of the F plasmid incompatibility.";
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 Exotoxin type
 SEQUENCE
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 SEQUENCE OF
 MEDLINE-81234554; PubMed-7018695;
Tolun A., Helinski D.R.;
 SEQUENCE OF 211-251 FROM
 Submitted (APR-2000)
 SEQUENCE OF 1-17 FROM N.A.
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 Mol. Biol.
 BL; AP001918; BAA97915.1; -.
BL; X03410; CAA27146.1; -.
BL; X04619; CAA28294.1; -.
R; A04485; QQECF.
R; D25783; D25783.
 SIMILARITY: REGIONS OF SIMILARITY WITH REPA PROTEIN OF THE PLASMID, BUT NOT WITH REPLICATION PROTEINS OF OTHER PLASMIDS.
 ne; EG40058; repE.
Pro; IPR000525; Initr_Re
PF01051; RepB_protein;
id; DNA_replication; Plant
 J01724; AAA91062.1; -.
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 Similarity
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 EG40058;
 KSDGTLQEHD
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 209-251 FROM
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 192:1-15(1986)
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 202:132-135(1986).
 PubMed-3007930;
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STRAIN-MGAS8232 / Serotype M18;
MEDLINE-21927593; PubMed=11917108;
Smoot J.C., Barbian K.D., Van Gompel J.J., Smoot L.M., Chaussee M.S., Sylva G.L., Sturdevant D.E., Ricklefs S.M., Porcella S.F., Parkins L.D., Beres S.B., Campbell D.S., Smith T.M., Zhang Q., Kapur V., Daly J.A., Veasy L.G., Musser J.M.;
"Genome sequence and comparative microarray analysis of serotype M18 group A Streptococcus strains associated with acute rheumatic fever outbreaks.";
PRINTS; PRO0279; BACTRLTOXIN.

PROSITE; PS00277; STAPH_STREP_TOXIN_1;
PROSITE; PS00278; STAPH_STREP_TOXIN_2;
TOXIn; Signal; 3D-structure.

SIGNAL 1 30
CHAIN 31 251 EXOTOXIN;
 Pfam;
Pfam;
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 MEDLINE-99094887; PubMed-9878045; PubMed-9878045; PubMed-9878045; PubMed-9878045; Othman D.M., Kline J.B., Papageorgiou A.C., Collins C.M., Gutman D.M., Kline J.B., O'Brien S.M., Tranter H.S., Acharya K.R.; "Structural basis for the recognition of superantigen streptococcal pyrogenic exotoxin A (SpeA1) by MHC class II molecules and T-cell receptors."; EMBO J. 18:9-21(1999).
 EMBL; AE009982; AAL97141.1;
PIR; A26152; A26152.
PIR; S29659; S29659.
PDB; 181Z; 24 NOV-99.
 InterPro; IPR001961; Stap/Strep_toxin.
Pfam; PF01123; Stap_Strp_toxin; 1.
Pfam; PF02876; Stap_Strp_tox_C; 1.
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 "Streptococcal pyrogenic exotoxin type A (scarelated to Staphylococcus aureus enterotoxin Mol. Gen. Genet. 203:354-356(1986).
 Johnson
 SEQUENCE FROM
 "Nucleotide sequence
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 MEDLINE-86166804; PubMed-3514452
 SEQUENCE FROM N.A.
 Bacteria; Firmicutes; Lactobacillales; Streptococcaceae;
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 Natl. Acad. Sci. U.S.A.
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 52:144-150(1986).
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 of the type A streptococcal exotoxin gene from Streptococcus pyogenes bacteriophage
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 x-RAY CRYSTALLOGRAPHY MEDLINE-99096298; Pub.
 Jardetzky T.S.,
Chi Y.I., Stauf
 Huang I.-Y., Bergdoll M.S.; ataphylococcal "The primary structure of staphylococcal cyanogen bromide peptides of reduced and B, and the complete amino acid sequence."
J. Biol. Chem. 245:3518-3525(1970).
 "Three-dimensional structure of a human noiecule complexed with superantigen."; 6]
 MEDLINE-94203282;
 Staphylococcus aureus Bacteria; Firmicutes;
 STAAU
 MEDLINE-93063291;
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 SEQUENCE OF 40-91
MEDLINE-85298255;
 SEQUENCE FROM N.A. MEDLINE-86168029;
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 K-RAY CRYSTALLOGRAPHY (2.5
 MEDLINE=71007902;
 SEQUENCE OF 28-266 (S-6)
 Ranelli D.M., Jones C.L., Johns M.B., Mussey G.J., "Molecular cloning of staphylococcal enterotoxin B Escherichia coli and Staphylococcus aureus."; Proc. Natl. Acad. Sci. U.S.A. 82:5850-5854(1985).

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 MEDLINE=98181012; PubMed=9514739;
Papageorgiou A.C., Tranter H.S., Acharya K.R.;
Papageorgiou A.C., Tranter H.S., Acharya K.R.;
"Crystal structure of microbial superantigen staphylococcal
enterotoxin B at 1.5-A resolution: implications for superantigen
recognition by MHC class II molecules and T-cell receptors.";
J. MOL. Biol. 277:61-79(1998).
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33 SEB; 27-MAY-98.
31 1SEB; 16-JUN-97.
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RESULT 10 G3P3\_YEAST ID G3P3\_YEAST AC P00359; DT 21-JUL-1986 DT 01-NOV-1995

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COMPLUYEAST-ZDPAGE; P00359; -.
SGD; S0003424; TDH3.
InterPro; IPR000173; GAP_dhdrogenase.
Pfam; PF00044; 9pdh; 1.
Pfam; PF02800; 9pdh_C; 1.
PRINTS; PR00078; G3PDHDRGNASE.
PROSITE; PS00071; GAPDH; 1.
 HSSP; P06977; 1GAD.
SWISS-2DPAGE; P00359; YEAST.
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 by microsequencing of in-gel trypsin generated peptides.";
Electrophoresis 16:149-156(1995).
-I- CATALYTIC ACTIVITY: D-glyceraldehyde 3-phosphate + pho:
NAD(+) = 3-phospho-D-glyceroyl phosphate + NADH.
-I- PATHWAY: Second phase of glycolysis; first step.
-I- SUBBUNIT: HOMOTETRAMER.
 Norbeck J., Blomberg A.;
Norbeck J., Blomberg A.;
"Gene linkage of two-dimensional polyacrylamide gel electrophoresis
resolved proteins from isogene families in Saccharomyces cerevisiae
resolved proteins from isogene families in Saccharomyces cerevisiae
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 "The
 15-JUN-2002 (Rel. 41, Last annotation update)
Glyceraldehyde 3-phosphate dehydrogenase 3 (EC 1.2.1.12) (GAPDH TDH3 OR GPD3 OR YGR192C OR G7576.
 EMBL;
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 PARTIAL SEQUENCE.
STRAIN-ATCC 38531
 MEDLINE-95203288; PubMed-7895733;
Garrels J.I., Futcher B., Kobayashi R.,
Volpe T., Warner J.R., McLaughlin C.S.;
 Saccharomyces cerevisiae Yeast 11:587-591(1995).
 the European Bioinformatics Institute.
 MEDLINE-95255188;
 SEQUENCE OF 46-57
 Arroyo J., Garcia-Gonzalez
 MEDLINE-95373283;
 SEQUENCE FROM N.A.
 Holland J.P., Holland M.J.;
 SEQUENCE FROM N.A.
MEDLINE-80027306; PubMed-385592;
 NCBI_TaxID=4932;
 Saccharomycetales;
 Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes;
 Saccharomyces cerevisiae (Baker's yeast)
 Electrophoresis 15:1466-1486(1994).
 "Protein identifications for a Saccharomyces cerevisiae protein
 The complete sequence
 Nombela
 Biol.
 3L; V01300; CAA24607.1; -.
3L; J01324; AAA88714.1; -.
3L; X82408; CAA57803.1; -.
3L; Z72977; CAA977218.1; -.
3; A00371; DEBYG2.
 SUBCELLULAR LOCATION: Cytoplasmic.
MISCELLANEOUS: THERE ARE THREE GENES FOR G3PDH IN YEAST
STATUS BELONGS TO THE GLYCERALDEHYDE 3-PHOSPHATE
 DEHYDROGENASE FAMILY.
 primary structure of a glyceraldehyde-3-phosphate dehydrogenase
from Saccharomyces cerevisiae.";
iol. Chem. 254:9839-9845(1979).
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 / Y41, and SKQ2N;
PubMed=7737086;
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Phasianidae; Phasianidae; Phasianidae; Phasianidae; Phasianidae; Phasianidae; Phasianidae; Phasianidae;
 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way
 Sawada K., Agata K., Eguchi G.;
Characterization of terminally differentiated cell categorizing cDNA clones derived from chicken lens:
Int. J. Dev. Biol. 40:531-535(1996).
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RA Brooks K., Brown D., Brown S., Chillingworth T., Churcher C.M.,
RA Gollins M., Connor R., Cronin A., Davis P., Feltwell T., Fraser A.,
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RA Holroyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
RA James K., Jones M., Leather S., McDonald S., McLean J.,
RA Mooney P., Moule S., Mungall K., Murphy L., Niblett D., Odell C.,
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RA Rutherford K., Rutter S., Saunders D., Seeger K., Sharp S.,
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RA Woodward J., Volkaert G., Aert R., Robben J., Grymonprez B.,
RA Galbert S., Vanstreels E., Rieger M., Schaefer M., Mueller-Auer S.,
RA Goffeau A., Cadleu E., Dreano S., Reinhardt R., Pohl T.M.,
RA Eger P., Zimmermann W., Wedler H., Wambutt R., Purnelle B.,
RA Goffeau A., Cadleu E., Dreano S., Glux S., Lelaure V., Mottier S.,
RA Gallbert F., Aves S.J., Xiang Z., Hunt C., Moore K., Hurst S. M.,
RA Lucas M., Rochet M., Gaillardin C., Tallada V.A., Garzon A., Thode G.,
RA Dominguez A., Revuelta J.L., Moreno S., Armstrong J., Forsburg S.L.,
RA Cerrutti L., Lowe T., McCombie W.R., Paulsen I., Potashkin J.,
RA Cerrutti L., Lowe T., McCombie W.R., Paulsen I., Potashkin J.,
RA Cerrutti L., Lowe T., McCombie W.R., Paulsen I., Potashkin J.,
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 EMBL; 273100; CAA97369.1; Hypothetical protein.
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 Schizosaccharomycetales; Schizosaccharomyces.
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 MEDLINE-21848401;
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 Schizosaccharomyces pombe (Fission yeast).
Eukaryota; Fungi; Ascomycota; Schizosaccharomycetes;
Schizosaccharomycetales; Schizosaccharomycetaceae;
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 between the Swiss Institute of Bioinformatics Institute.
 Wilson R., Bentley D., Scheet P.;
Submitted (MAR-1999) to the EMBL/GenBank/DDBJ databases
-!- SIMILARITY: BELONGS TO THE ARS2 FAMILY.
 Caenorhabditis elegans.
Eukaryota; Metazoa; Nemato
Rhabditidae; Peloderinae;
 Q966L5;
 Andersson S.G.E., Zomorodipour A., Andersson J.O., Sicheritz-Ponten T., Alsmark U.C.M., Podowski R.M., Naeslund Eriksson A.-S., Winkler H.H., Kurland C.G.; "The genome sequence of Rickettsia prowazekii and the origin mitochondria.";
 STRAIN-Bristol
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 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation -
 NCBI_TaxID=6239;
 EMBL; AJ235273; CAA15279.1; -.
 SEQUENCE FROM N.A. STRAIN-Madrid E; MEDLINE-99039499;
 Rickettsiaceae; Rickettsieae; NCBI_TaxID=782;
 Rickettsia prowazekii.
Bacteria; Proteobacteria; alpha subdivision; Rickettsiales;
 30-MAY-2000
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(Rel. 40, Last annotation update)
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 PubMed=9823893;
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 EMBL; Z98763; CAB11490.1; -.
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InterPro; IPR002931; Trnsglumase_like.
 entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
 MEDLINE=21848401; PubMed=11859360;
Wood V., Gwilliam R., Rajandream M.A., Lyne M., Lyne R., S
Sgouros J., Peat N., Hayles J., Baker S., Basham D., Bowma
Sgouros K., Brown D., Brown S., Chillingworth T., Churcher
 014302;
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 5-JUL-1998
5-JUN-2002
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| 23     | 23        | 23     | 23                 | 23     | 23       | 23                 | 23     | 23     | 23                 | 23     | 23     | 23     | 23     | 23     | 23     | 24     | 24     | 24     | 24         | 24             | 24     | 24                 | 24     | 24          | 24         | 24              | 24         | 24                 |
| 69.7   | 69.7      | 69.7   | 69.7               | 69.7   | 69.7     | 69.7               | 69.7   | 69.7   | 69.7               | 69.7   | 69.7   | 69.7   | 69.7   | 69.7   | 69.7   | .72.7  | 72.7   | 72.7   | 72.7       | 72.7           | 72.7   | 72.7               | 72.7   | 72.7        | 72.7       | •               | •          | 72.7               |
| 572    | 565       | 565    | 561                | 405    | 405      | 324                | 271    | 239    | 239                | 239    | 239    | 239    | 239    | 239    | 234    | 955    | 955    | 603    | 603        | 549            | 256    | 256                | 256    | 233         | 209        | 209             | 209        | 209                |
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| Q8U8I8 | Q98CC3    | Q9A2H4 | Q9X4E1             | Q8VW49 | Q9XBU4   | 043270             | Q9F0L6 | Q06535 | 006534             | Q06533 | Q06532 | Q06531 | 005157 | Q53678 | Q9R5X4 | Q8VHL8 | Q9QY37 | Q81076 | 8474       | Q9LN29         | Q9S1H8 | Q9S1H9             | Q9x9R8 | Q99XW1      | Q9LAC3     | Q9LAC4          | Q9LAC5     | Q9LAC6             |
|        |           |        |                    |        |          |                    |        |        |                    |        |        |        |        |        |        | •      |        |        |            |                |        |                    |        |             |            |                 |            |                    |
|        | rhizobium |        | Q9x4el rhodobacter |        | bacillus | O43270 homo sapien |        | to     | Q06534 staphylococ | w      | œ      | 1 5    |        | 69     | staph  | Bug    | mus mu | human  | human para | ln29 arabidops |        | Q9s1h9 streptococc | Œ      | 1 streptoco | streptococ | lac4 streptococ | streptococ | Q9lac6 streptococc |

## ALIGNMENTS

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Streptococcus pyogenes.*;
J. Exp. Med. 189:89-102(1999).
EMBL; AF086626; AAD52087.1; -.
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Proft T., Moffatt S.L., Berkahn C.J.,
"Identification and characterization
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01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
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 Fraser J.D.;
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 Pfam; PF01123; Stap_Strp_toxin; Pfam; PF02876; Stap_Strp_tox_C; PRINTS; PR00279; BACTRLTOXIN.
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01-OCT-2000 (TrEMBLrel. 15,
01-MAR-2002 (TrEMBLrel. 20,
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 Mosaic Structure, and Significant J. Exp. Med. 191:1765-1776(2000).
 Proft T., Moffatt
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Bacteria; Firmicutes; E
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PRINTS; PR00279; BACTRLTOXIN.
 InterPro; IPR001961; Stap/Strep_toxin.
 The Streptococcal
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S.L., Weller K.D
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Mitogenic exotoxin Z-7 (I
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 "The Streptococcal Superantigen SMEZ Exhibits Wide Allelic Mosaic Structure, and Significant Antigenic Variation."; J. Exp. Med. 191:1765-1776(2000).
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Bacteria; Firmicutes; |
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Fraser J.D.;
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Proft T., Moffatt
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 Fraser J.D.;
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 Mitogenic exotoxin
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 AF143655; AAF66656.1;
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 The Streptococcal Superantigen SMEZ
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|            |          |          | Arabidopsis thalia | Drosophila melanog | Zea mays protein f | Human polypeptide | Arabidopsis thalia | Protein involved i |          |          | Human secreted pro |          | secreted p |          | nthase-li |          | Zea mays protein f |          | Novel human diagno |          |          | Peptide from regio |          |          |          | ~        |          |          |          |          |          |          | Streptomyces livid | S. lividans xylana | Human ovarian anti |

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|                                                                                                                                                                                               | 20-AUG-1999<br>23-AUG-1999<br>23-AUG-1999<br>25-AUG-1999<br>26-AUG-1999<br>27-AUG-1999<br>27-AUG-1999<br>31-AUG-1999<br>31-AUG-1999<br>31-AUG-1999<br>31-AUG-1999<br>31-SEP-1999<br>10-SEP-1999<br>10-SEP-1999<br>11-SEP-1999<br>11-SEP-1999<br>11-SEP-1999<br>21-SEP-1999<br>22-SEP-1999                                                                                                                                                       | 04-AUG-1999 04-AUG-1999 05-AUG-1999 05-AUG-1999 06-AUG-1999 06-AUG-1999 09-AUG-1999 11-AUG-1999 11-AUG-1999 11-AUG-1999 13-AUG-1999 13-AUG-1999 18-AUG-1999 18-AUG-1999                                                                                                                                                 | 20-Jul<br>20-Jul<br>21-Jul<br>21-Jul<br>21-Jul<br>22-Jul<br>22-Jul<br>22-Jul<br>22-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23-Jul<br>23 |
|                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                         | 99US-0144352. 99US-0144884. 99US-0144814. 99US-0145086. 99US-0145087. 99US-0145087. 99US-0145145. 99US-0145145. 99US-0145145. 99US-0145145. 99US-0145218. 99US-0145276. 99US-0145218. 99US-0145218. 99US-0145218. 99US-0145218. 99US-0145218. 99US-0145218.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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990S-0159331 990S-0159637

99US-01

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RESULT 2
AAB38172

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 Query Match
Best Local :
 Matches
 25-OCT
 Nucleic acids encoding human secreted proteins, used to prevent, ameliorate, or diagnose conditions such as autoimmune disorders, disorders and cancer -
 26-MAR-1999;
22-DEC-1999;
 22-MAR-2000; 2000WO-US07526
 05-OCT-2000
 WO200058468-A2
 Homo sapiens.
 wound
 antirheumatic; antiproliferative; cytostatic; cardiant; vasotropic; cerebroprotective; nootropic; neuroprotective; antibacterial; virucide; fungicide; ophthalmological; gene therapy; autoimmune disease; infection; hyperpoliferative disorder; cardiovascular disorder; angiogenesis;
 Human;
 Gene 3
 30-JAN-2001
 AAB38172;
 AAB38172 standard;
 Rosen
 cerebrovascular
 26-0CT-1
 25-OCT-
 (HUMA-) HUMAN GENOME SCI INC
 -OCT-1999
 2000-611713/58.
 ÇĄ,
 healing;
 13
 secreted
 human
 3 KKXXXXXXLD
 1999;
 .
 Similarity
 KKAADAAALD
 and
 Ruben SM,
 Conservative
 (first entry)
 secreted protein
 cancer
 99US-0161920.
99US-0161992.
99US-0161993.
99US-0162142.
 990S-0126600.
990S-0171550.
 99US-
 99US-0161359.
 99US-0160768
99US-0160770
 disorder; nervous system disorder; ocular
skin aging; food additive; preservative.
 99US-0161406
 99US-0161405
 990S-0160981
 99US-0160814
 protein;
 Protein; 46 AA.
 -0161360.
 22
 12
 -0160815
 -0160767
 aging;
 -0160980
 67.9%;
 Komatsoulis
 .60989
 diagnosis; immunosuppressive; antiarthritic;
 0
 Score
Pred.
 homologous amino acid sequence #111.
 Mismatches
 ຸດ
 19;
 ŏ.
 4.9e+02;
 DB 21;
 9
 Length 378
 Indels
 disorder;
 0
 Gaps
 skin .
 0
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disorders, cerebrovascular disorders, anglogenesis, nervous system disorders, infections caused by bacteria, viruses and fungi and ocular disorders. The polypeptides can also be used to aid wound healing and epithelial cell proliferation, to prevent skin aging due to sunburn, to maintain organs before transplantation, for supporting cell culture of primary tissues, to regenerate tissues and in chemotaxis. The polypeptides can also be used as a food additive or preservative to increase or decrease storage capabilities. AAC69390 to AAC69398 and
 cytostatic; cardiant; vasotropic; cerebroprotective; nootropic; neuroprotective; antibacterial; virucide; fingicide; and ophthalmological. The polynucleotides and polypeptides can be are used to prevent, treat or ameliorate a medical condition in e.g. humans, mice, rabbits, goats, horses, cats, dogs, chickens or sheep. They are also used in diagnosing a pathological condition or susceptibility to a pathological condition or susceptibility to a pathological condition or susceptibility to a pathological condition. Disorders which are diagnosed or treated include autoimmune diseases, hyperproliferative disorders, cardiovascular autoimmune diseases, hyperproliferative disorders, cardiovascular
 invention. Human secreted proteins and cells the genes are expressed immunosuppressive; antiarthritic;
 human secreted proteins given in AAB38119 to AAB38165. AAB38166 to AAB38201 represent human secreted polypeptide sequences and proteins homologous to them, which are given in the exemplification of the pro-
 The
 invention
 increase or decrease storage capabilities. AAC69390
AAB38118 represent sequences used in the exemplifica
 polynucleotide sequences given in AAC69399
 Human secreted proteins have activities based on the tissues
 46
 antirheumatic; antiproliferative;
 in. Example of activities include:
 in the exemplification of the present
 to AAC69445 encode
 present
 the
 et 6
```

RESULT 3 AAB38173 Matches Query Match Best Local Similarity 30-JAN-2001 AAB38173; AAB38173 standard; Protein; 46 19 3 KKXXXXXXLD 12 4. KKSAAESMLD Conservative (first entry) 64.38; 40.08; 0 Score 18; DB 21; Pred: No. 1.5e+02; 8 Mismatches 6 Length 46; Indels 0 Gaps

0

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Sequence

Ä

Human secreted protein sequence encoded by gene 3 SEQ Ħ NO:112

cerebroprotective; nootropic; neuroprotective; antibacterial; virucide; fungicide; ophthalmological; gene therapy; autoimmune disease; infection; hyperproliferative disorder; cardiovascular disorder; anglogenesis; cerebrovascular disorder; nervous system disorder; ocular disorder; Human; secreted protein; diagnosis; immunosuppressive; antiarthritic; antirheumatic; antiproliferative; cytostatic; cardiant; vasotropic; wound healing; skin aging; food additive; preservative

Homo sapiens

WO200058468-A2

05-OCT-2000.

22-MAR-2000; 2000WO-US07526

26-MAR-1999; 22-DEC-1999; 99US-0126600. 99US-0171550.

(HUMA-) HUMAN GENOME SCI INC

Rosen CA, Ruben SM, Komatsoulis 9

WPI; 2000-611713/58

Disclosure; Page 362; 374pp; English

Disclosure; Page 362; 374pp;

English

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RESULT 4
AAG02207
밁
 õ
 Invention: Human secreted proteins have activities based on the tissues and calls the genes are expressed in. Example of activities include: immunosuppressive; antiarthritic; antirheumatic; antiproliferative; cytostatic; cardiant; vasotropic; cerebroprotective; nootropic; cerebroprotective; antibacterial; virucide; fungicide; and polypeptides can be are used to prevent, treat or ameliorate a medical condition in e.g. humans, mice, crabbits, goats, horses, cats, dogs, chickens or sheep. They are also used in diagnosing a pathological condition or susceptibility to a gathological condition. Disorders which are diagnosed or treated include sutcimmune diseases, hyperproliferative disorders, cardiovascular conditions, and condition of susceptibility to a gathological condition. Disorders which are diagnosed or treated include autoimmune diseases, hyperproliferative disorders, cardiovascular conditions caused by bacteria, viruses and fungi and ocular disorders, infections caused by bacteria, viruses and fungi and ocular condition organs before transplantation, for supporting cell culture of primary tissues, to regenerate tissues and in chemotaxis. The colypeptides can also be used to aid wound healing and condition organs before transplantation, for supporting cell culture of primary tissues, to regenerate tissues and in chemotaxis. The colypeptides can also be used as a food additive or preservative to increase or decrease storage capabilities. AAC69390 to AAC69398 and condition of the present invention.
 Query Match
Best Local
 Matches
 gene
 N-PSDB;
 Dumas Milne Edwards J,
 Homo sapiens
 AAG02207 standard; Protein; 147
 Sequence
 (GEST) GENSET
 21-FEB-2000;
 06-SEP-2000
 EP1033401-A2
 AAG02207
 AAB38201 represent human secreted polypeptide sequences and proteins homologous to them, which are given in the exemplification of the pro-
 The polynucleotide sequences
 2000-500381/45
 therapy;
 secreted protein, SEQ ID NO: 6288
 19 KKSAAESMLD
 Lynucleotide sequences given in AAC69399 to AAC69445 encode secreted proteins given in AAB38119 to AAB38165. AAB38166 to
 5' EST;
 w
 AAC02213
 Similarity
4; Conser
 KKXXXXXXLD 12
 46
 Conservative
 2000EP-0200610.
 (first entry)
 expressed sequence chromosome mapping.
 99US-0122487
 28
 64.3%;
 Duclert
 Score 18;
Pred. No.
 8
 ?
 Mismatches
 tag; secreted protein; cDNA isolation;
 Giordano
 DB 21; L-
. 1.5e+02; 6;
 Length 46
 Indels
 0;
 Gaps
 0
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The present sequence is a polypeptide encoded by one of a large number of 5' ESTs derived from mRNAs encoding secreted proteins. The 5' ESTs were prepared from total human RNAs or polyA+ RNAs derived from 30 different tissues. EST sequences usually correspond mainly to the 3' untranslated region (UTR) of the mRNA because they are often obtained from oligo-dT primed CDNA libraries. Such ESTs are not well suited for isolating cDNA sequences derived from the 5' ends of mRNAs and even in those cases where longer CDNA sequences have been obtained, the full 5' UTR is rarely included. 5' ESTs are derived from mRNAs with intact 5' ends and apprehenciated. 5' ESTs are derived from mRNAs with intact 5' ends and each thorefore by useful to the full to the sequences have been obtained.
 Claim 13;
 New nucleic acid that is a 5' expressed sequence tag (5' EST) for obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and fo
 diagnostic, forensic, gene therapy and chromosome mapping procedures
 SEQ
 ID 6288; 71pp + CD-ROM; English.
 for
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밁
 Ş
 Matches
 Query Match
Best Local
78
 4;
 Similarity
KKKRAATTLD
 KKXXXXXXLD
 Conservative
87
 12
 64.38;
 0,
 Score
Pred.
 Mismatches
 N 18
 DB 21; L. 4.4e+02;
 Length 147;
 0;
 Gaps
```

0

ends and can therefore be used to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used in diagnostic, forensic, gene therapy and chromosome mapping procedures. They are used to obtain upstream

expression and

secretion

vectors.

Sequence

147

A,

regulatory sequences and to design

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RESULT 5
AAW48271
Rat ninjurin
 23-JUN-1998
 AAW48271;
 AAW48271 standard; Protein; 152
 (first
 entry)
 Š
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H

nerve injury Rat; ninjurin; induced gene; cellular adhesion molecule; membrane bound; nduced gene; inflammation; nervous system.

29-JAN-1998

WO9803650-A1

24-JUL-1997; 97WO-US12210

24-JUL-1996; 96US-0672850

(UNIW ) UNIV WASHINGTON

Araki T, Milbrandt

WPI; 1998-120775/11. N-PSDB; AAV20665.

N-PSDB;

New isolated nerve injury induced (ninjurin) gene - used to develop products for treating conditions involving excessive or insufficient cellular adhesion, e.g. inflammation or tumours

Claim 5; Fig 1B; 80pp; English.

The present sequence represents rat ninjurin 1 (nerve injury induced). The ninjurin prote peripheral nervous urin protein (NP) plays a role in axonal regeneration of all nervous system (PNS) neuronal cells after injury. The can be used for developing products for treating ninjurin disorders including conditions involving inappropriate (i.e. insufficient) cellular adhesion.

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RESULT 6
AAW48272
ID AAW4
 Matches
 Query Match
Best Local
 excessive cellular adhesion which may be treated include e.g. inflammatory diseases such as rheumatoid arthritis, asthma, allergy conditions, adult respiratory distress syndrome, inflammatory bowel diseases (e.g. Crohn's disease, ulcerative colitis and regional enteritis) and ophthalmic inflammatory diseases, autoimmune diseases, thrombosis or inappropriate platelet aggregation conditions,
 The present sequence represents human ninjurin 1 (nerve injury induced). The ninjurin protein (NP) plays a role in axonal regeneration of peripheral nervous system (PNS) neuronal cells after injury. The products can be used for developing products for treating ninjurin mediated disorders including conditions involving inappropriate (i.e. excessive or insufficient) cellular adhesion. Conditions involving excessive cellular adhesion which may be treated include e.g.
 Claim 6;
 Human; ninjurin; cell nerve injury induced
 metastasis conditions. The products can also be used to promote cellular adhesion, e.g. in nerve regeneration, wound healing or prosthetic implantation. The products can also be used for determining the products of the products can also be used for determining assays.
 enteritis) and ophthalmic inflammatory diseases, autoimmune diseases thrombosis or inappropriate platelet aggregation conditions, arteriosclerosis, reocclusion following thrombolysis, cardiovascular diseases, some forms of diabetes and neoplastic disease including
 cellular
 products
 AAW48272 standard; Protein; 152
 excessive cellular adhesion which may be treated include e.g. inflammatory diseases such as rheumatoid arthritis, asthma, allergy conditions, adult respiratory distress syndrome, inflammatory bowel diseases (e.g. Crohn's disease, ulcerative colitis and regional
 New isolated nerve injury induced (ninjurin) gene - used to develop products for treating conditions involving excessive or insufficient
 WPI;
 Araki T,
 24-JUL-1996;
 29-JAN-1998
 Homo
 Sequence
 (WIND)
 24-JUL-1997;
 WO9803650-A1
 Human ninjurin
 23-JUN-1998
 AAW48272
 Local
 1998-120775/11.
 sapiens.
 44
 w
 UNIV WASHINGTON
 Fig
 ٠.
 Similarity
 adhesion, e.g.
 KKSAAESMLD
 KKXXXXXLD
 Milbrandt J;
 152
 Conservative
 2В;
 (first
 96US-0672850
 A.
 97WO-US12210
 80pp; English.
 cellular adhesion molecule; membrane bound;
 53
 12
 entry)
 gene; inflammation; nervous system
 64.3%;
 inflammation
 0,
 Score 18; DB Pred. No. 4.56 0; Mismatches
 ₹
 မ္
 DB 19;
4.5e+02;
 5,
 Length
 Indels
cardiovascular
 152;
 detection
 0;
 Gaps
 0
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amino acid

sequences of the invention.

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RESULT 7
ABG20269
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 Q
 នន្តន្តន្តន្ត្
 polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The polymerased sequence tags for identifying expressed genes. (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II), is useful for generating annibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as a food supplement. (II) and its binding partners are useful in medical imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polynucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and amino acid sequences. ABG00010-ABG30377 represent novel human
 Query Match
Best Local S
Matches 4
 metastasis conditions. The products can also be used to promote cellular adhesion, e.g. in nerve regeneration, wound healing or prosthetic implantation. The products can also be used for detection, purification, diagnosis and screening assays.
 The invention relates to isolated polynucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes,
 New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess
 31-MAR-2000;
23-AUG-2000;
 Claim 20; SEQ
 Drmanac RT,
 30-MAR-2001; 2001WO-US08631.
 food
 biodiversity
 N-PSDB;
 WO200175067-A2
 Homo sapiens.
 Novel human diagnostic
 18-FEB-2002
 ABG20269;
 ABG20269 standard; Protein; 173 AA
 Sequence
 diseases, some forms of diabetes and neoplastic disease including
 (HYSE-) HYSEQ INC
 11-OCT-2001
 n; chromosome supplement; n
 2001-639362/73
 44 KKSAAESMLD
 w
 AAS84456
 Similarity
 KKXXXXXXLD
 152
 Liu C,
 Conservative
 2000US-0540217
2000US-0649167
 (first entry)
 ID No 50628; 103pp;
 $
 mapping; gene mapping;
medical imaging;
 12
 53
 64.3%;
 Tang
 protein #20260.
 TY.
 gene mapping; gene therapy;
maging; diagnostic; genetic or
 Score 18;
Pred. No.
 Mismatches
 English
 DB 19;
4.5e+02;
 Length 152
 disorder.
 0,
 Gaps
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RESULT 8
AAW74903
ID AAW7
 3505×3
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 Š
 Query Match
Best Local Similarity
Matches 4; Conser
 11 APR-1997
11 APR-1997
11 APR-1997
11 APR-1997
11 APR-1997
11 APR-1997
11 APR-1997
11 APR-1997
11 APR-1997
23 -MAY-1997
 02-OCT-1997;
07-MAR-1997;
07-MAR-1997;
07-MAR-1997;
07-MAR-1997;
07-MAR-1997;
 11-APR-1997;
11-APR-1997;
11-APR-1997;
 Homo
 Human; secreted protein; testis; tumour; foetal brain tissue; fusion protein; cancer; central nervous system; seizure; diagnosis; neurodegenerative disease.
 Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences.
 11-APR-1997
11-APR-1997
 06-MAR-1998;
 11-SEP-1998
 Sequence
 07-MAR
 W09839448-A2
 Misc-difference
 Key
 Human secreted
 25-JAN-1999
 AAW74903;
 AAW74903 standard; Protein; 200
 sapiens.
 141 KKAASHRALD 150
 3 KKXXXXXXLD 12
 173
 Conservative
 (first entry)
 9705-0061060
9705-0040161
9705-0040161
9705-0040163
9705-0040133
9705-0040331
9705-0040331
9705-00403311
9705-0043311
9705-0043313
9705-0043313
9705-0043569
9705-0043576
9705-0043580
9705-0043580
9705-0043679
9705-0043679
9705-0043679
9705-0043679
9705-004379
9705-004379
9705-004379
9705-0047503
9705-0047503
9705-0047581
 Ą,
 protein encoded
 98WO-US04493
 Location/Qualifiers
200
/label= unknown
 64.38;
40.08;
 0;
 Score
Pred.
 γď
 Ā
 Mismatches
 gene 176 clone HFTBR48
 18; DB 22;
No. 5.1e+02;
 6,
 Length 173
 Indels
 0;
 Gaps
 0
 Bednarik DP,
Feng P, Ferri
Kyaw H, Lafle
 22-AUG-1997
22-AUG-1997
22-AUG-1997
22-AUG-1997
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22-AUG-1997
22-AUG-1997
22-AUG-1997
22-AUG-1997
22-AUG-1997
22-AUG-1997
22-AUG-1997
23-SEP-1997
05-SEP-1997
 22-AUG-1997;
22-AUG-1997;
22-AUG-1997;
22-AUG-1997;
22-AUG-1997;
 23-MAY-1997;
23-MAY-1997;
23-MAY-1997;
06-JUN-1997;
06-JUN-1997;
 18-AUG-1997;
22-AUG-1997;
22-AUG-1997;
22-AUG-1997;
 13-JUN
08-JUL
16-JUL
 (HUMA-) HUMAN
 -AUG-1997;
Ferrie AM,
Lafleur DW,
 Brewer
 GENOME
 9705-0056880
9705-0056884
9705-0056884
9705-0056886
9705-0056887
9705-0056889
9705-0056892
9705-0056893
9705-0056893
9705-0056903
9705-0056903
9705-0056910
9705-0056910
9705-0057650
9705-0057650
9705-0057650
9705-0057650
 970S-0047585.
970S-0047586.
970S-0047587.
970S-0047599.
970S-0047599.
970S-0047593.
970S-0047593.
970S-0047597.
970S-0047597.
970S-0047601.
970S-0047611.
970S-0047613.
970S-0047633.
970S-0047633.
970S-0056630.
970S-0056631.
970S-0056631.
970S-0056631.
970S-0056631.
970S-0056632.
970S-0056631.
LA, Carter KC, Duan
Fischer CL, Florence
Li Y, Moore PA, Ni
 SCI
J, K, R
Ebner R, Er
Greene JM,
Olsen HS, F
```

Endress GA; 1, Hu JS; Rosen CA;

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RESULT 9
 Query Match
Best Local :
 Matches
 This sequence represents a secreted human protein encoded by the nucleic acid molecule designated Gene 176 from the human cDNA clone HFTBR48 (deposited as clone ATCC 97904 and ATCC 209050).

The gene can be used to generate fusion proteins by linking to the gene to a human immunoglobulin Fc portion (e.g. AAV59502) for increasing the stability of the fused protein as compared to the human protein only. The invention relates to 186 novel genes and their fragments (nucleic acid sequences: AAV59511-V59812; amino acid sequences AAV74731-W75026) which are useful for preventing, treating or ameliorating medical conditions e.g. by protein or gene therapy. Also, pathological conditions can be diagnosed by determining the amount of the new polypucleotides. Specific uses are described for each of the 186 polynucleotides, based on which tissues they are most highly expressed in
 Key
Protein
WPI; 2001-024998/03.
N-PSDB; AAC85203.
 Arabidopsis thaliana.
 Plant; D-like cyclin inhibitor gene; BRO4; hyperplastic; variant; growth rate; dividing cells; inactivation; protoplast; seed;
 Claim
 New isolated human genes and the secreted polypeptide(s) they encode - useful for diagnosis and treatment of e.g. cancers, neurological disorders, immune diseases, inflammation or blood disorders
 15-MAY-2000; 2000WO-US13379
 23-NOV-2000.
 WO200069883-A1
 root cell; meristem; leaf.
 Plant D-like cyclin inhibitor BRO2.
 22-MAR-2001
 AAB47003;
 AAB47003 standard; Protein;
 Sequence
 Roberts J,
 (HUTC-)
 14-MAY-1999; 99US-0134373
 Ruben
 (see AAV59511 for described uses).
 151 KKAASHRALD 160
 , MS
 HUTCHINSON CANCER RES
 Similarity
 4
 Page 649-650;
 KKXXXXXXLD 12
 Shi Y,
 Kelly B;
 200 AA;
 Conservative
 (first entry)
 Location/Qualifiers 20..147
 /label- BRO2
 Soppet
 64.38;
 721pp; English
 DR,
 213
 0
 Score 18; DB 19;
Pred. No. 5.8e+02;
 CENT FRED
 Young PE,
 B
 Mismatches
 Ϋ́u
 ď,
 Length 200;
 Zeng
 Indels
 Z
 0
 Gaps
 0
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KKXXXXXXLD

12

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a yeast two hybrid screen. The BRO2 protein was found to contain a seven amino acid sequence cyclin binding domain similar to that of BRO1, BRO3 and BRO4 (See also ABB47005-6). The DNA encoding this sequence is homologous to a sequence present in a D-like cyclin inhibitor gene and when integrated at the corresponding locus, functionally inactivates plant D-like cyclin inhibitor protein expression. The BRO4 coding sequence may be used to produce a hyperplastic variant plant, increase the growth rate of a plant, or increase the proportion of dividing cells in a plant cell population, relative to a wild-type plant, by functionally inactivating the expression of a plant, by functionally gene in a plant. BRO4 is useful for increasing the proportion of dividing cells in a plant a plant cell population comportising protoplast, seeds, root cells, meristem cells or leaf cells.
 Query Match
Best Local :
 Matches
 Functionally inactivating expression of plant D-like cyclin inhibitor gene for producing a hyperplastic variant plant, modulating the growth and/or yield of plants, and increasing the proportion of dividing cells
 Sequence
 The sequence given inhibitor, BRO2. T
 Example 1; Page 38-39; 50pp; English.
 Local Similarity
 4.
 213 AA;
 Conservative
 n in AAB47003 represents a plant D1 The DNA encoding this sequence was
 40.0%;
 0
 Score 18; DB 22;
Pred. No. 6.1e+02;
Mismatches
 Length 213
Indels
 cyclin
isolated using
0;
Gaps
0
```

```
CCC XXX PTT CCC
 RESULT 10
AAR29641
ID AAR29
 В
 PX PX
 YX
X
 CT; pCTD; epithelium; ocula mucosa; uro-genital mucosa; antigen; monoclonal; polyclonal; antibody; vaccine.
 Claim 1; Page 8-16; 40pp; English
 e.g. venereal
 PCTD plasmid from Chlamydia Trachomatis and immunogenic proteins - for diagnosing and vaccinating against Chlamydia infections
 N-PSDB; AAQ27429
 Comanducci M,
 07-FEB-1991;
 17-APR-1991;
 EP499681-A.
 Chlamydia trachomatis.
 PCTD ORF 6
 05-FEB-1993
 AAR29641;
 AAR29641 standard; Protein;
 WPI; 1992-285922/35.
 (ISTS) SCLAVO SPA.
 26-AUG-1992
 10
 KKTKTYTSLD
 (first entry)
 lymphogranuloma
 Giuliani
 91IT-0000314
 91EP-0106110
 19
 ž
 247
 Ratti G,
 Tecce
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The sequences given in AAR29636-43 are encoded by the plasmid isolated from Chlamydia trachomatis (CT) serotype D, pCTD. This serotype generally infects epithelial tissues, such as the ocular and

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 ព្រះព្រះព្រះជន
 Query Match
Best Local S
Matches 4
 The invention relates to 2175 novel human ovarian antigens (ABP41054-ABP43228) and to cDNAs encoding them (ABQ54131-ABQ56305), and also encompasses polypeptides 90% identical and polynucleotides 95% identical to the sequences of the invention. The invention additionally relates to recombinant vectors and host cells comprising human ovarian antigen polynucleotides, antibodies against human ovarian antigens, and the use of ovarian antigen polynucleotides and polypeptides in diagnosing, treating, prognosing or preventing various ovary and/or breast-related disorders. Such conditions include ovarian cancer and breast cancer, and
 Isolated nucleic acid molecules encoding novel ovarian polypeptides, useful in the prevention, treatment and diagnosis of cancer (e.g. ovarian cancer), immune disorders, cardiovascular disorders and neurological diseases -
 Human; ovarian antigen; ovary; ovarian; breast; cancer; tumour; ovarian cancer; breast cancer; tumour; reproductive system disorder; infertility; pregnancy disorder; anovulation; polycystic ovary syndropcos; ovarian cyst; dysmenorrhoea; endocrine disorder; infection; inflammatory condition; immune disorder; blood disorder; cardiovascular disorder; respiratory disorder; neurological disorder; gastrointestinal disorder; urinary system disorder; drug screening; gene therapy; chromosome mapping; forensic analysis; antibody preparation; cytostatic; immunomodulatory; neuroprotective;
 uro-genital mucous membranes, and shows a low virulence. Of the eight proteins encoded by the plasmid, seven are encoded by the sense strand and the eighth is encoded by the complementary strand. These proteins can be used as antigens for the preparation of poly- and mono-clonal antibodies to be used in diagnostics. The antigens can also be used in the formulation of vaccines against infections due to CT.
 07-JUN-2000; 2000US-209467P
 WO200200677-A1
 ABP41256 standard; Protein;
 Claim 11; SEQ ID No 2388;
 07-JUN-2001; 2001WO-US18569.
 Homo sapiens
 antiinflammatory;
 Human ovarian antigen HOFNY16,
 Sequence
 Local Similarity
 2002-147878/19
 CE,
 13
 w
 KKXXXXXXLD
 KKNQTAASLD
 Rosen
 247 AA;
 Conservative
 (first entry)
 CA;
 gynaecological;
o
f
 22
 12
 64.3%;
 2922pp;
 0
 Score 18;
Pred. No.
 SEQ
 Mismatches
 English
 reproductive
 ID NO: 2388.
 7e+02;
 DB 13;
 6;
 neurological disorder;
 Length 247;
 Indels
 0;
 syndrome;
 0
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RESULT 12
AAW93144
밁
 δõ
 Matches
 Query Match
Best Local
 and urinary system disorders. Ovarian antigen polypeptides and polynucleotides may also be used in screening for compounds which modulate ovarian antigen expression or activity. The polynucleotides may further be used for gene therapy, chromosome mapping, in the identification of individuals and in forensic analysis, and the polypeptides may be used as food additives or to prepare antibodies useful in disease diagnosis, drug targeting and phenotyping. The present sequence represents a human ovarian antigen of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at fire wipo.int/pub/published_pct_sequences.
 shock syndrome), inflammatory conditions (e.g., mastitis, oophoritis and vaginitis), immune disorders (e.g., congenital and acquired immunodeficiencies, autoimmune oophoritis, systemic lupus erythematosus), blood-related disorders (e.g., anaemia), cardiovascular disorders, respiratory disorders, neurological disorders, gastrointestinal disorders and urinary system disorders. Ovarian antigen polypeptides and
 New
 WPI;
 Beaulieu
 16-FEB-1999
 US5871730-A
 Xylanase A; acidophilic; thermostable; XYL I; XYL II; plant biomass;
hemicellulase; beta-1,4 bond; xylosic chain; xylan; D-xylose; paper;
pulp; chlorine bleaching; feed; beta-glucan; cellulose; lignin.
 S. lividans xylanase A protein Stmxlna
 AAW93144 standard; Protein; 406 AA
 (UYSH) UNIV
 29-JUL-1994;
 29-JUL-1994;
 Streptomyces
 21-MAY-1999
 Sequence
 disorders, infections (e.g., chlamydia, HIV, toxoplasmosis, and
 disorders (e.g., infertility, disorders of pregnancy, anovulation
 polycystic ovary syndrome, ovarian cysts,
 Local
 acidophilic and thermostable xylanase enzymes from Actinomadura FC7 - useful for treating plant biomass, especially paper and pulp, to degrade hemicellulose and hydrolyse xylan
 1996-141348/15
 236
 w
 ! Similarity
4; Conserv
 ú
 KKAASHRALD
 KKXXXXXXLD
 284
 Conservative
 SHERBROOKE
 lividans
 Brzezinski R,
 (first entry)
 A.
 94US-0282197
 94US-0282197
 245
 12
 64.3%;
 English
 Dery CV;
 Score 18; DB Pred. No. 7.960; Mismatches
 DB 23;
7.9e+02;
 mass, especially hydrolyse xylan
 and dysmenorrhoea),
 6,
 Length
 Indels
 0
 endocrine
 Gaps
 toxic
 0
```

This invention describes the use of novel acidophilic and thermostable xylanase enzymes (XYL I and XYL II) from actinomadura sp. FC7 which retain their activity under harsh industrial conditions (e.g. high temperature or wide pH ranges) and may be secreted by recombinant host cells, to treat plant biomass. Xylanases XYL I and XYL II are part of

enzymes

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XYL II are part of

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AAW93155
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 RESULT 13
 CC beta-1,4 bonds within the xylosic chain of xylan (a polymer of D-xylose CC residues that is a major constituent of hemicellulose). This means that CC they may be used in the paper and pulp industry to improve the efficiency CC of the bleaching process by degrading the structure of the material.

CC XYL I and XYL II may also be used to treat feed, by degrading a CC substrate with a high beta-glucan or cellulose content. XYL I and XYL II CC retain their activity at high temperatures (e.g. 70 deg. C) and at low CC pHs (e.g. 4.0), conditions which tend to denature most known xylanases.

CC Enzymes that remain active in these conditions may be used in industrial CC processes that are carried out at high temperature and low pH to speed up CC other, non-enzymatic reactions, minimising costs, energy requirements, CC and the risk of pollution, (e.g. enzymes XYL I and XYL II can be used to facilitate chlorine bleaching of paper pulp which is carried out in hot, CC acidic conditions). Pretreatment with XYL I and XYL II, allows the CC leaching agents to penetrate better, to remove lignin from the pulp and CC objects can be used to produce the same or a better result. Also,
 Query Match
Best Local
 Matches
 This invention describes the use of novel acidophilic and thermostable xylanase enzymes (XYL I and XYL II) from Actionmadura sp. FC7 which retain their activity under harsh industrial conditions (e.g. high temperature or wide pH ranges) and may be secreted by recombinant host cells, to treat plant blomass. Xylanases XYL I and XYL II are part o
 New acidophilic and thermostable xylanase enzymes from Actinomadura sp. FC7 - useful for treating plant biomass, especially paper and wood pulp, to degrade hemicellulose and hydrolyse xylan
 Xylanase A; acidophilic; thermostable; XYL I; XYL II; plant biomass; hemicellulase; beta-1,4 bond; xylosic chain; xylan; D-xylose; paper; pulp; chlorine bleaching; feed; beta-glucan; cellulose; lignin.
 Beaulieu C,
 29-JUL-1994;
 29-JUL-1994;
 16-FEB-1999
 US5871730-A
 Streptomyces
 Streptomyces
 AAW93155;
 AAW93155 standard; Protein;
 Sequence
 (UYSH) UNIV
 Local
 330
 ω
 8
 4
 Similarity
 KKAAYTAVLD 339
 KKXXXXXXLD
 the structure aids water drainage. patent is an equivalent to Fi9503640.
 406
 Conservative
 lividans.
 SHERBROOKE
 lividans xylanase A protein.
 (first entry)
 Brzezinski R,
 B
 11;
 94US-0282197
 94US-0282197
 12
 64.3%;
 English.
 420 AA.
 Dery CV;
 Score 18; DB Pred. No. 1.1e 0; Mismatches
 0;
 xylanases
enzymes and
 DB 17;
1.1e+03;
 6,
 Length 406;
 Indels
 γď
XYL II are part of by cutting the
 0
 Gaps
 0;
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RESULT 14
AAW93157
밁
 3888888888888888888888888888888888888
 Š
 cc beta-1,4 bonds within the xylosic chain of xylan (a polymer of D-xylose cresidues that is a major constituent of hemicellulose). This means that constituent of hemicellulose, and the major constituent of hemicellulose. This means that constituent of the material constituent of the bleaching process by degrading the structure of the material.

CC XIL I and XIL II may also be used to treat feed, by degrading a construction of the material constituent of the material constituent and the paper activity at high temperatures (e.g. 70 deg. C) and at low pls (e.g. 4.0), conditions which tend to denature most known xylanases. Enzymes that remain active in these conditions may be used in industrial consesses that are carried out at high temperature and low plt to speed up other, non-enzymatic reactions, minimising costs, energy requirements, and the risk of pollution, (e.g. enzymes XYL I and XYL II can be used to calificate chlorine bleaching of paper pulp which is carried out in hot, conditions of pertreatment with XYL I and XYL II, allows the bleaching agents to penetrate better, to remove lighth from the pulp and conditions to penetrate better, to remove lighth from the pulp and conditions the colouration from it. This means smaller quantities of the agents can be used to produce the same or a better result. Also,
 Matches
 Query Match
 New acidophilic and thermostable xylanase enzymes from Actinomadura sp. FC7 - useful for treating plant biomass, especially paper and wood pulp, to degrade hemicellulose and hydrolyse xylan
 WPI; 1996-141348/15
 Beaulieu C,
 29-JUL-1994;
 16-FEB-1999
 Streptomyces lividans.
 Xylanase A; acidophilic; thermostable; XYL I; XYL II; plant biomass;
hemicellulase; beta-1,4 bond; xylosic chain; xylan; D-xylose; paper;
pulp; chlorine bleaching; feed; beta-glucan; cellulose; lignin.
 Streptomyces lividans xylanase A protein.
 21-MAY-1999
 AAW93157
 Sequence
 29-JUL-1994;
 (UYSH) UNIV SHERBROOKE
 Local
 330
 Similarity 4; Conserv
 standard; Protein; 420
 KKAAYTAVLD
 KKXXXXXXLD
 420
 patent is
 Conservative
 Brzezinski
 (first entry)
 94US-0282197
 94US-0282197
 12
 64.3%;
 an equivalent to FI9503640
 ্স
 Dery CV;
 0
 Score 18;
Pred. No.
 Mismatches
 1.1e+03;
 B
 17;
 6,
 Length 420;
 0
 Gaps
 0
```

This invention describes the use of novel acidophilic and thermostable xylanase enzymes (XYL I and XYL II) from Actinomadura sp. FC7 which retain their activity under harsh industrial conditions (e.g. high temperature or wide pH ranges) and may be secreted by recombinant host cells, to treat plant biomass. Xylanases XYL I and XYL II are part o

enzymes

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XYL II are part of cutting

Example

9;

60pp;

English

```
RESULT 15
ABG19070
 Query Match
Best Local
 Matches
The invention relates to isolated polynucleotide (I) and polypeptide (II) sequences. (I) is useful as hybridisation probes, polymerase chain reaction (PCR) primers, oligomers, and for chromosome and gene mapping, and in recombinant production of (II). The
 other, non-enzymatic reactions, minimising costs, energy requirements, and the risk of pollution, (e.g. enzymes XYL I and XYL II can be used to facilitate chlorine bleaching of paper pulp which is carried out in hot, acidic conditions). Pretreatment with XYL I and XYL II, allows the bleaching agents to penetrate better, to remove light from the pulp and bleach, the colouration from it. This means smaller quantities of the agents can be used to produce the same or a better result. Also, disrupting the structure alds water drainage.
 New isolated polynucleotide and encoded polypeptides, useful in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits and to assess biodiversity
 beta-1,4 bonds within the xylosic chain of xylan (a polymer of D-xylose residues that is a major constituent of hemicellulose). This means that they may be used in the paper and pulp industry to improve the efficiency of the bleaching process by degrading the structure of the material.

XYL I and XYL II may also be used to treat feed, by degrading a substrate with a high beta-glucan or cellulose content. XYL I and XYL II retain their activity at high temperatures (e.g. 70 deg. C) and at low pHs (e.g. 4.0), conditions which tend to denature most known xylanases. Enzymes that remain active in these conditions may be used in industrial processes that are carried out at high temperature and low pH to speed up there non-conventions maintaining costs and the processes.
 Claim 20; SEQ ID No 49429; 103pp; English
 WPI; 2001-639362/73.
N-PSDB; AAS83257.
 31-MAR-2000;
23-AUG-2000;
 Homo sapiens
 Human; chromosome mapping; gene mapping; gene therapy; forensic food supplement; medical imaging; diagnostic; genetic disorder.
 Drmanac RT, Liu C,
 30-MAR-2001; 2001WO-US08631.
 11-OCT-2001.
 WO200175067-A2
 18-FEB-2002 (first entry)
 (HYSE-) HYSEQ INC
 Novel human diagnostic protein #19061.
 ABG19070 standard; Protein; 618 AA.
 Sequence
 Local Similarity es 4; Conserv
 330
 This
 3 KKXXXXXXLD 12
 KKAAYTAVLD 339
 patent is an equivalent to FI9503640.
 420 AA;
 Conservative
 2000US-0540217.
2000US-0649167.
 64.3%;
 Tang
 YT;
 0
 Score 18;
Pred. No.
 Mismatches
 DB 17;
1.1e+03;
 6
 Length 420;
 Indels
 forensic;
 0
 Gaps
 0;
```

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```
Matches
 Query Match
Best Local Similarity
 a food supplement. (II) and its binding partners are useful in medical imaging of sites expressing (II). (I) and (II) are useful for treating disorders involving aberrant protein expression or biological activity. The polypeptide and polynucleotide sequences have applications in diagnostics, forensics, gene mapping, identification of mutations responsible for genetic disorders or other traits to assess biodiversity and to produce other types of data and products dependent on DNA and amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic amino acid sequences of the invention.

Note: The sequence data for this patent did not appear in the printed specification, but was obtained in electronic format directly from WIPO
 Sequence
 for identifying expressed genes. (I) is useful in gene therapy techniques to restore normal activity of (II) or to treat disease states involving (II). (II) is useful for generating antibodies against it, detecting or quantitating a polypeptide in tissue, as molecular weight markers and as
 at ftp.wipo.int/pub/published_pct_sequences
 polynucleotides are also used in diagnostics as for identifying expressed genes. (I) is useful:
 4.
 618 AA;
 Conservative
 64.3%;
 0,:
 Score 18; Pred. No.
 Mismatches
 DB 22;
1.6e+03;
 expressed sequence tags
 Length 618
 Indels
 0
Gaps
 0
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Search completed: June Job time: 40.7273 secs 5, 2003, 16:00:25 밁 Ş

372 KKVTLSTSLD 3 KKXXXXXXLD

381

Title: Perfect score: Sequence:

US-09-150-947F-17 28 1 XXKKXXXXXXLD 12

protein

protein search, using sw model

Copyright

GenCore version 5.1.6 (c) 1993 - 2003 Compugen

June

5,

Scoring table:

BLOSUM62 Gapop 10.0 ,

Gapext

Minimum Maximum

B B

seq

length: 0 length: 2000000000

Post-processing:

Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database

Issued\_Patents\_AA:\*

6.5432

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/cgn2\_6/ptodata/1/1aa/B\_COMB.pep:\*
/cgn2\_6/ptodata/1/1aa/PCTUS\_COMB.pep:\*
/cgn2\_6/ptodata/1/1aa/backfiles1.pep:\*

Result

Score

Query

BB

ij

SUMMARIES

Sequence

0

664.3 664.3 664.3 664.3 664.3 664.3 664.3 660.7

200 237 237 247 247 247 247 247 705 705 177 177 177 177 177 177 177

Total number of hits satisfying chosen parameters:

262574 segs, 29422922 residues

Searched:

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 No. 1s the number of results predicted by chance to have a
re greater than or equal to the score of the result being printed,
is derived by analysis of the total score distribution.

 2003, 15:23:33 ; Search time 10.5455 Seconds (without alignments)
33.481 Million cell updates/sec
 262574
 Description
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8, Appli
19, Appli
 32, Appl
32, Appl
18, Appl
18, Appl
18, Appl
18, Appl
52, Appl
63, Appl
66, Appl
8, Appl
8, Appl
19, Appl
 13, Appl
4, Appli
6, Appli
12, Appl
495, Appl
 TELLERAX: (415) 398-3249

INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 100 anino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: protein
US-08-672-850-13
 RESULT 1
US-08-672-850-13
 밁
 Ş
 Query Match
Best Local Similarity
Matches 4; Conserv
 Sequence 13, Application Patent No. 6140117
 GENERAL INFORMATION:
 ATTORNEY/AGENT INFORMATION:
NAME: S11Va, ROBIN M.
REGISTRATION NUMBER: 38,304
REFERENCE/DOCKET NUMBER: A-1
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/0:
FILING DATE: 24-JUL-1996
CLASSIFICATION: 435
 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
 TITLE OF INVENTION: NINJURIN
NUMBER OF SEQUENCES: 34
CORRESPONDENCE ADDRESS:
 APPLICANT: Milbrandt, Jeffrey APPLICANT: Araki, Toshiyuki
 STREET: Four Embarco
CITY: San Francisco
 COUNTRY:
 TELEPHONE:
 ADDRESSEE:
 44
 94111
 KKSAAESMLD
 KKXXXXXXLD
 California
 E: Flehr, Hohbach, Test, Four Embarcadero Center,
 600.77
600.77
600.77
600.77
 United States
 Conservative
 (415) 781-1989
 12
 64.3%;
 US/08672850
 us/08/672,850
 US-08-896-933-31
US-09-314-235-31
US-08-446-918A-6
US-08-580-806-6
US-08-580-806-6
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US-08-494-223B-111
US-08-495-551A-111
US-08-475-668A-11
US-08-471-913A-111
US-08-471-913A-111
US-08-471-349A-111
US-08-473-349A-111
US-08-473-349A-111
US-08-473-349A-111
US-08-473-349A-111
US-08-473-349A-111
US-08-473-349A-111
US-08-473-349A-111
US-08-473-349A-111
US-08-473-349A-111
 Score 18; DB Pred. No. 96; 0; Mismatches
 0;
 A-63610
 ALIGNMENTS
 Version #1.30
 Albritton & Herbert
Suite 3400
 4
 Length 100;
 Indels
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Sequence
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Sequence
Sequence
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 31, Appl
31, Appl
6, Appl
6, Appl
2, Appl
2, Appl
111, App
 Gaps
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RESULT 2 US-08-672-850-4

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 밁
 RESULT 3
US-08-672-850-6
 US-08-672-850-4
 Matches
 Query Match
 sequence 6, Application US/08672850 Patent No. 6140117
 Sequence 4, Application US/08672850 Patent No. 6140117
 GENERAL INFORMATION:
 GENERAL INFORMATION:
 TELEFAX: (415) 398-3249
(INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 152 amino acids
 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
 MOLECULE TYPE: protein
 REFERENCE/DOCKET NUMBER: A-
TELECOMMUNICATION INFORMATION:
 CURRENT APPLICATION DATA:
 APPLICANT: Milbrandt, Jeffrey
APPLICANT: Araki, Toshiyuki
 ATTORNEY/AGENT INFORMATION:
 COMPUTER READABLE FORM:
 NUMBER OF SEQUENCES: 3
 APPLICANT:
 UMBER OF SEQUENCES:
 ORRESPONDENCE ADDRESS:
 ITLE OF INVENTION:
 TITLE OF INVENTION: NINJURIN
 Local Similarity
 NAME: Silva, Robin M. REGISTRATION NUMBER:
 CLASSIFICATION: 435
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 COUNTRY:
 STREET:
 ADDRESSEE:
 TOPOLOGY:
 STRANDEDNESS:
 TELEPHONE:
 APPLICATION NUMBER: FILING DATE: 24-JU
 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE:
 MEDIUM TYPE: Floppy disk
 ADDRESSEE:
 44 KKSAAESMLD 53
 94111
 San Francisco
 San Francisco
 amino acid
 KKXXXXXXLD 12
 California
 California
 E: Flehr, Hohbach, Test, Four Embarcadero Center,
 Four Embarcadero Center, Suite 3400
 Araki, Toshiyuki
VENTION: NINJURIN
 United States
 Conservative
 unknown
 United States
 PatentIn Release #1.0, Version #1.30
 Araki, Toshiyuk:
 Milbrandt, Jeffrey
 Flehr, Hohbach, Test, Albritton & Herbert
 (415) 781-1989
 unknown
 64.3%;
US/08/672,850
 US/08/672,850
 38,304
 A-63610
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 Score 18;
 Suite 3400
 Albritton & Herbert
 DB 4;
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 Indels
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US-08-672-850-12
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 TELEFAX: (415) 398-3249 INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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INFORMATION FOR SEQ ID NO:
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 ATTORNEY/AGENT INFORMATION:
 SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
 SEQUENCE CHARACTERISTICS:
 TELECOMMUNICATION INFORMATION: TELEPHONE: (415) 781-1989
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CORRESPONDENCE ADDRESS:
 APPLICANT:
 REFERENCE/DOCKET NUMBER: A-TELECOMMUNICATION INFORMATION:
 MOLECULE TYPE:
 ATTORNEY/AGENT INFORMATION:
 TITLE OF INVENTION:
 STRANDEDNESS:
TOPOLOGY: un
 MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
 NAME: Silva, Robin M.
REGISTRATION NUMBER: 38,304
REFERENCE/DOCKET NUMBER: A-
 TYPE: amino acid
 FILING DATE: 24-JUL
CLASSIFICATION: 435
 COUNTRY:
 STRANDEDNESS:
 NAME: Silva, Robin M. REGISTRATION NUMBER:
 LENGTH:
 APPLICATION NUMBER: US/08/672,850 FILING DATE: 24-JUL-1996
 ADDRESSEE:
 Local Similarity 40.0 es 4; Conservative
 TOPOLOGY:
 LENGTH:
 TELEPHONE:
 CLASSIFICATION:
 FILING DATE:
 INFORMATION:
 44 KKSAAESMLD 53
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 3 KKXXXXXXLD 12
 Similarity
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 California
 Application US/08672850
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 Araki, Toshiyuki
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 Milbrandt, Jeffrey
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 (415) 781-1989
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 24-JUL-1996
)N: 435
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 64.3%;
 38,304
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 12:
 A-63610
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 A-63610
 Score 18;
Pred. No.
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44

53

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 R FILING DATE:
R APPLICATION N
R FILING DATE:
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 APPLICATION NUMBER:
 APPLICATION NUMBER:
APPLICATION FILING DATE:
 APPLICATION NUMBER: 60/047,613 FILING DATE: 1997-05-23 APPLICATION NUMBER: 60/047,582 FILING DATE: 1997-05-23 APPLICATION NUMBER: 60/047,596
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FILING DATE:
 APPLICATION NUMBER: 60/047,500 FILING DATE: 1997-05-23 APPLICATION NUMBER: 60/047,587 FILING DATE: 1997-05-23
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: 1997-05-23
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 60/040,162
 PCT/US98/04493
 US/09/149,476
 60/047,584
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ER FILLING DATE: 1997-08-22

ER APPLICATION NUMBER: 60/056,874

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ER FILLING DATE: 1997-08-22

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R FILING DATE: 1997-06-06
RR APPLICATION NUMBER: 60/05
RR FILING DATE: 1997-08-22
R FILING DATE: 1997-08-22 APPLICATION N
FILING DATE: APPLICATION NUMBER: 60/043,313 FILING DATE: 1997-04-11 APPLICATION NUMBER: 60/043,672 APPLICATION NUMBER: 60/043,669
FILING DATE: 1997-04-11
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 CATION NUMBER: 60/047,501
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 60/047,595
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 Score 18;
Pred. No.
 Mismatches
 1.7e+02;
 DB 4;
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 Indels
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 Gaps
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 US-09-234-613-32
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 US-08-933-750C-32
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Best Local Similarity
Matches 4; Conserv
 Patent No.
 GENERAL INFORMATION:
 INFORMATION FOR SEQ ID NO:
 ATTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF
 CLASSIFICATION: 536
PRIOR APPLICATION NUMBER:
 SOFTWARE: FastSEQ for CURRENT APPLICATION DATA:
 SEQUENCE CHARACTERISTICS:
 TELECOMMUNICATION INFORMATION: TELEPHONE: 415-855-0555
 COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
 APPLICANT:
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 IMMEDIATE SOURCE:
 CORRESPONDENCE ADDRESS
 NUMBER OF SEQUENCES:
 TITLE OF
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 COMPUTER: IBM CON OPERATING SYSTEM:
 STREET: 31/4 FUL
CITY: Palo Alto
 STRANDEDNESS:
 TELEFAX:
 LIBRARY:
 TELEPHONE:
 FILING DATE:
 APPLICATION NUMBER:
 COUNTRY: UZIP: 94304
 ADDRESSEE:
 ENGTH:
 No.
 189 KKAASHRALD 198
 INFORMATION:
 3 KKXXXXXXLD
 ?, Application US/09234613
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 5932442
F: Au-Young, Janice
F: Yue, Henry
F: Guegler, Karl J.
F: Corley, Neil C.
INVENTION: HUMAN REGULATORY MOLECULES
 T: Guegler, Karl J.
T: Corley, Neil C.
INVENTION: HUMAN REGULATORY MOLECULES
 CA
 1602473
 Lal, Preeti
Hillman, Jennifer I
Bandman, Olga
 237
 3174 Porter Drive
 USA
 BLADNOT03
 415-845-4166
 Shah, Purvi
 Conservative
 Yue, Henry
 Au-Young, Janice
 Shah, Purvi
 Hillman, Jennifer L.
Bandman, Olga
 IBM Compatible
 linear
 Incyte Pharmaceuticals, Inc
 amino acids
 September
N: 536
 Preet1
 single
 12
 64.3%;
 for Windows Version 2.0
 98
 us/08/933,750C
 32:
 PF-0356 US
 Score
Pred.
 Mismatches
 6,
 Length 237;
 Indels
 0;
 Gaps
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CORRESPONDENCE ADDRESS NUMBER OF SEQUENCES:

98

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 US-08-969-644-18
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US-09-234-613-32
 Patent No. 6
 Best
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 Matches
 GENERAL INFORMATION:
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LENGTH: 237 amino acid
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: FastSEQ for Windows Version CURRENT APPLICATION DATA:
 COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
 TITLE OF
 IMMEDIATE SOURCE:
 TELECOMMUNICATION INFORMATION: TELEPHONE: 415-855-0555
 FILING DATE: September 2
ATTORNEY/AGENT INFORMATION:
NAME: Billings, Lucy J.
 PRIOR APPLICATION DATA:
APPLICATION NUMBER:
 CORRESPONDENCE ADDRESS:
 NUMBER OF SEQUENCES:
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 TITLE OF
 APPLICANT:
 APPLICANT:
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 APPLICANT:
 MEDITARY: BLANCE 1602473
 CLASSIFICATION:
 OPERATING SYSTEM:
 COUNTRY:
 STREET: 301 N. Washington Street CITY: Falls Church
 STRANDEDNESS:
 TELEFAX:
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 COUNTRY:
 STATE:
 LENGTH:
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 REGISTRATION NUMBER:
 APPLICATION NUMBER: US/09/234,613
 ADDRESSEE:
 Local
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 189 KKAASHRALD 198
 94304
 h 64.3%; Score 18; DB 4; Similarity 40.0%; Pred. No. 2e+02; 4; Conservative 0; Mismatches
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 Palo Alto
 22046-0747
 INVENTION:
 INVENTION:
 KKXXXXXXLD 12
 Virginia
 S
 Application US/08969644
 3174 Porter Drive
 USA
 BLADNOT03
 USA
 Comanducci, Maurizio Tecce, Mario F.
 415-845-4166
 Giuliani, Marzia M.
 Ratti, Giulio
 IBM Compatible
 BIRCH, STEWART, KOLASCH & BIRCH
 linear
 Incyte Pharmaceuticals,
 amino acids
 single
 PCTD PLASMID ISOLATED FROM CHLAMYDIA
TRACHOMATIS SEROTYPE D, ITS GENES AND PROTEINS ENCODED
THEM; RECOMBINANT PLASMIDS FOR THE EXPRESSION OF SAID
GENES IN HETEROLOGOUS SYSTEMS, PREPARATION OF SAID
 us/08/933,750
ber 23, 1997
 36,749
 PF-0356 US
 DB 4;
 Length 237;
 Indels
 0
 Gaps
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 밁
 US-08-444-189-18
 US-08-969-644-18
 Patent No.
 Matches
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 Query Match
 GENERAL INFORMATION:
 INFORMATION FOR SEQ ID NO:
 TITLE OF INVENTION:
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TITLE OF INVENTION:
TITLE OF INVENTION:
 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Rel CURRENT APPLICATION DATA:
 TELECOMMUNICATION INFORMATION: TELEPHONE: 703-241-1300
 SEQUENCE CHARACTERISTICS
 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
FILING DATE: 13-NOV-19
 MOLECULE TYPE: protein
 ATTORNEY/AGENT INFORMATION:
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 NUMBER OF SEQUENCES:
 CLASSIFICATION: 435
 STREET: 301 N. Washington Street CITY: Falls Church
 TOPOLOGY:
 REFERENCE/DOCKET NUMBER:
 REGISTRATION NUMBER: 30
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 Comanducci, Maurizio
 PatentIn Release #1.0, Version #1.25
 Tecce, Mario F
 Ratti, Giulio
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 BIRCH,
 07-FEB-1991
 13-NOV-1997
 22
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 PCTD PLASMID ISOLATED FROM CHLAMYDIA
TRACHOMATIS SEROTYPE D, ITS GENES AND PROTEINS ENCODED BY
THEM; RECOMBINANT PLASMIDS FOR THE EXPRESSION OF SAID
GENES IN HETEROLOGOUS SYSTEMS, PREPARATION OF SAID
 STEWART,
 Release #1.0,
 US/07/661,820
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us/07/661,820
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 US/08/180,528
 US/08/444,189
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 08/467,152
 US/08/969,644
 30,330
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Pred. No. 2e+02;
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 Version
 DB 3;
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US-08-468-544-18
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 GENERAL INFORMATION:
 INFORMATION FOR SEQ ID NO:
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 SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/468,544
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MEDIUM TYPE: Floppy disk
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APPLICATION NUMBER: US 07/661,820
PILING DATE: 28-FEB-1991
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 SEQUENCE CHARACTERISTICS
 TELECOMMUNICATION INFORMATION: TELEPHONE: 703-241-1300
 ATTORNEY/AGENT INFORMATION:
 APPLICANT: Giuliani, PITLE OF INVENTION: FITLE OF INVENTION: TO THE TRANSPORT OF THE TRANSP
 NAME: Svensson, Leonard R.
REGISTRATION NUMBER: 30,330
REFERENCE/DOCKET NUMBER: 1267-202P
 LECOMMUNICATION NUMBER: 30,330
REFERENCE/DOCKET NUMBER: 126
LECOMMUNICATION INFORMATION TELEPHONE
 TELEFAX:
 FILING DATE: 07-FEB-1991
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 TELEPHONE:
 TELEFAX:
 FILING DATE:
APPLICATION NUMBER:
 LENGTH:
 FILING DATE
 ESSEE: BIRCH, STEWART, KOLASO

ET: 301 N. Washington Street

:: Falls Church

E: Virginia
 18,
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 3 KKXXXXXXLD 12
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 22046-0747
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 247 amino acids
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 703-241-2848
 Tecce, Mario F
 Comanducci, Maurizio
 Ratti, Giulio
 protein
 06-JUN-1995
 JMBER: IT MI 91A000314
07-FEB-1991
 64.38;
 PCTD PLASMID ISOLATED FROM CHLAMYDIA TRACHOMATIS SEROTYPE D, ITS GENES AN THEM; RECOMBINANT PLASMIDS FOR THE E. GENES IN HETEROLOGOUS SYSTEMS, PREPAI
 Marzia M.
 US/08/468,544
 1267-202P
 Score 18;
Pred. No.
 KOLASCH & BIRCH
 Mismatches
 Version #1.25
 2e+02;
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 ITS GENES AND PROTEINS ENCODED BY:
IDS FOR THE EXPRESSION OF SAID
YSTEMS, PREPARATION OF SAID
 Length 247;
 Indels
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 0
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 US-08-282-197C-63
 δÃ
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 US-08-282-197C-52
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 Patent No.
 Matches
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Best Local Similarity
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 APPLICANT:
APPLICANT:
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 SOFTWARE: PatentIn Rel
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MEDIUM TYPE: Floppy disk
APPLICANT:
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 ATTORNEY/AGENT INFORMATION:
 CORRESPONDENCE ADDRESS:
 TITLE OF INVENTION:
 NUMBER OF SEQUENCES:
 LENGTH: 406 amino acids
TYPE: amino acid
TOPOLOGY: both
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 E: Sterne, Kessler,
1100 New York Ave.,
 202-371-2540
 USA
 Beaulieu,
Brzezinski, Ryszard
 Conservative
 Conservative
 Dery, Claude
 Brzezinski, Ryszard
 IBM
 29-JUL-1994
DN: 435
 PC compatible
EM: PC-DOS/MS-DOS
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 US/08/282,197C
 Release #1.0, Version #1.25
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 33,851
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APPLICANT:

Dery, Claude V Beaulieu, Carole

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MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC COMPUTER:
OPERATING SYSTEM: PC-DOS/MS-DOS
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 SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/282,197C
 TELECOMMUNICATION INFORMATION
 CORRESPONDENCE ADDRESS:
 CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
 CURRENT APPLICATION DATA:
 CORRESPONDENCE ADDRESS
 CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
 ITTLE OF INVENTION: Thermostable Xylanase DNA, Protein and
ITTLE OF INVENTION: Methods of Use
 NUMBER OF SEQUENCES:
 PPLICANT:
 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
 APPLICATION NUMBER: FILING DATE: 29-JUI
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 REGISTRATION NUMBER:
 FILING DATE: 29-JUL-1994
 COUNTRY:
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 APPLICATION NUMBER:
 ADDRESSEE:
 LENGTH:
 REGISTRATION NUMBER:
 330 KKAAYTAVLD 339
 3 KKXXXXXXLD 12
 20005
 20005
 5871
 Washington
 Washington
 amino acid
 Cimbala, Michele A
VATION NUMBER: 33,851
 Cimbala, Michele A
 g
 몽
 Application US/08282197C
 E: Sterne, Kessler,
1100 New York Ave.,
 3: Sterne, Kessler,
1100 New York Ave.,
 420 amino acids
 USA
 Conservative
 USA
 Beaulieu,
 PatentIn
 Brzezinski, Ryszard
 Dery, Claude
 202-371-2600
 29-JUL-1994
NUMBER:
 64.3%;
 Methods of Use
 Thermostable Xylanase DNA, Protein and
 Release #1.0, Version #1.25
 US/08/282,197C
 33,851
1050.0410000
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 Score 18;
Pred. No.
 1050.0410000
 Goldstein & Fox P.L.L.C
NW
 Goldstein & Fox P.L.L.C NW
 Mismatches
 1e+02
 Length 420;
 Indels
 0
 Gaps
 0
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 US-08-282-197C-66
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US-08-468-812-8
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 TELEFAX: 202-371-2540 INFORMATION FOR SEQ ID NO:
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 TITLE OF INVENTION:
 APPLICANT:
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 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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 330 KKAAYTAVLD 339
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 Washington
 20005
 Bugaisky, Larry
 amino acid
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 E: STERNE, KESSLER,
1100 New York Ave.,
 420 amino acids
 491 amino acids
 U.S.A.
 M ntyl
 Conservative
 Suominen, Pirkko
Lahtinen, Tarja
 Fagerstr m,
 Vehmaanper
 both
 PatentIn Release #1.0, Version #1.30
 Paloheimo,
 Kristo, Paula
 Floppy disk
 UMBER: US 08/282,001
29-JUL-1994
 06-JUN-1995
 31-OCT-1994
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 64.3%;
 Raija
 Actinomadura Xylanase Sequences and Methods of Use
 KESSLER,
 US 08/332,412
 US/08/468,812
 Marja
 35,086
 Richard
 Jari
 66:
 1050.0340002
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 GOLSTEIN & FOX
 Mismatches
 o
.
 1e+02
 Length 420;
 Indels
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 Gaps
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US-08-590-563-8
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; CHROMOSOME/SEGMENT: M64551
US-08-468-812-8
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US-08-590-563-8
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FILING DATE: 29-JUL-1994
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ATTORNEY/AGENT INFORMATION:
NAME: BUSAISKY, LAWTENCE B.
REGISTRATION NUMBER: 35,086
REFERENCE/DOCKET NUMBER: 1050.03400.
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TELECAX: 202-371-2540
 Sequence 8, Application US/08590563 Patent No. 6300114
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FILING DATE: 31-0CT-1994
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FILING DATE: 06-JUN-1995
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 CHROMOSOME/SEGMENT: M64551
 ADDRESSEE:
 333 KKAAYTAVLD 342
 3 KKXXXXXXLD 12
 E: STERNE, KESSLER, GOLDSTEIN & FOX, P.L.L.C.
 Paloheimo, Marja
Suominen, Pirkko
Lahtinen, Tarja
VENTION: Production and Secretion of Proteins of
 M ntyl , Arja
Vehmaanper , Jari
Fagerstr m, Richard
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Pred. No. 3.6e+02;
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Maximum Match 100%
Listing first 45 summaries
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 Maximum
 Minimum
 Total number of hits satisfying chosen parameters:
 Perfect score:
 Title:
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 Published_Applications_AA: *
 GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd
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US-10-125-692-16
0 US-09-770-621-8
 US-09-465-714-2

US-09-465-714-3

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US-10-002-784A-12

US-09-465-714-1

US-08-882-431-14

US-09-870-759-12
 US-10-001-879-145
US-09-465-714-4
US-09-729-674-76
 US-10-113-809-3
 US-09-
US-09-
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 Sequence 495, App Sequence 32, Appl Sequence 16, Appl Sequence 17, Appl Sequence 4, Appl Sequence 4, Appl Sequence 76, Appl Sequence 3, Appl Sequence 3, Appl Sequence 12, Appl Sequence 12, Appl Sequence 11, Appl Sequence 12, Appl Sequence 12, Appl Sequence 12, Appl Sequence 14, Appl Sequence 16, Appl Sequence 16, Appl Sequence 17, Appl Sequence 17, Appl Sequence 18, App
 Description
Sequence
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|--------------------|--------------|--------------|-------------|--------------------|--------------------|--------------------|--------------------|----------------|----------------------|----------------------|---------------------|-------|-----------|-------|----------------------|-------|----------------------|---------------------|--------|---------------------|-------------------|-------------------|-------------------|---------------------|----------------------|--------------------|
| 10 0/.1            | 16 57 1      | 16 57 1      |             | •                  | -                  | -                  | -                  |                |                      |                      |                     |       |           |       |                      |       |                      |                     |        |                     | 16 57.1           |                   |                   |                     | 17 60.7              | 17 60.7            |
| 03                 | n (          | ים           | 69          | 69                 | 69                 | 63                 | 63                 | 39             | 38                   | 36                   | 35                  | 26    | 25        | 16    | 14                   | 14    | 13                   | 13                  | 13     | 12                  | 12                | 12                |                   |                     | 623                  | 582                |
| 3 03-10-034-233-10 | 10-064-305-1 | 10-053-758-1 | - 438-486-1 | 9 US-09-766-253-16 | 9 US-09-843-676-16 | 9 US-10-044-539-65 | 9 US-10-044-692-65 |                | 10 US-09-071-838-150 | 9 US-09-764-891-4313 | 10 US-09-150-947B-8 | 0S-09 | 0S-09-803 | 0S-09 | 10 US-09-150-947B-10 | 0S-09 | 10 US-09-150-947B-11 | 10 US-09-150-947B-6 | US-09- | 10 US-09-150-947B-2 | 9 US-10-113-809-4 | 9 US-10-113-809-1 |                   | 10 US-09-150-947B-3 | 9 US-09-738-626-5990 | 9 US-10-046-938-29 |
| sequence to, Appr  | ,            |              | ָ<br>ק      | 16,                |                    | 65,                | 65, ,              | Sequence 12, / | Sequence 150,        | Sequence 4313        | Sequence 8,         | 1,    | 29        | 7, A  | Sequence 10,         | 9,    | Sequence 11,         | σ,                  | 5      | Sequence 2, Appli   | Sequence 4, Appli | Sequence 1, Appli | Sequence 4, Appli | Sequence 3, Appli   | Sequence 5990        | Sequence 29, Appl  |

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; OTHER INFORMATION: Xaa equals stop translation
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US-09-809-391-495
 Sequence 32, Application UPatent No. US20020058264A1
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 Prior application data removed - consult PALM or file wrapper NUMBER OF SEQ ID NOS: 761
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 495
LENGTH: 200
 Sequence 495, Applic Publication No. US20 GENERAL INFORMATION:
 APPLICANT: Ruben et al. TITLE OF INVENTION: 186 FILE REFERENCE: PZ002P2
 CURRENT FILING DATE:
 CURRENT APPLICATION NUMBER: US/09/809,391
 FEATURE:
 ORGANISM: Homo sapiens
 TYPE: PRT
 APPLICANT: Lal, Preeti
 151 KKAASHRALD 160
 3 KKXXXXXXLD 12
 Application US/09809391
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 Hillman, Jennifer
Bandman, Olga
Shah, Purvi
Au-Young, Janice
 186 Human Secreted proteins
 2001-03-
 64.3%;
 US/09840787
 0
 Score 18; DB 9;
Pred. No. 2e+02;
D; Mismatches
 ŗ
 6;
 Length 200;
 Indels
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 Gaps
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OF INVENTION: HUMAN REGULATORY MOLECULES R OF SEQUENCES: 98

Guegler, Karl Corley, Neil C

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 FILE REFERENCE: P-IS 5155
CURRENT APPLICATION NUMBER: US/10/125,692
CURRENT FILING DATE: 2002-04-17
SOFTWARE: F
 PRIOR APPLICATION NUMBER: US 60/285,477 PRIOR FILING DATE: 2001-04-20
 APPLICANT: Ozinsky, Adrian
TITLE OF INVENTION: Toll-Like Receptor 5 Ligands and Methods
TITLE OF INVENTION: of Use
 NUMBER OF SEQ ID NOS:
 APPLICANT:
 APPLICANT:
 10-125-692-16
 APPLICANT:
 INFORMATION
 Match 64.3%;
Local Similarity 40.0%;
 TELEPHONE: 415-855-0555
 APPLICATION NUMBER: 09/518,865 FILING DATE: <Unknown> ATTORNEY/AGENT INFORMATION:
 PRIOR APPLICATION DATA:
 CURRENT APPLICATION DATA:
 ZIP: 94304
COMPUTER READABLE FORM:
 SEQUENCE DESCRIPTION: SEQ ID NO: 32 :
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 CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte
 INFORMATION:
 189 KKAASHRALD 198
 3 KKXXXXXXLD 12
 FastSEQ for Windows Version 4.0
 CLONE: 16
 APPLICATION NUMBER: US/09/840,787
FILING DATE: 23-Apr-2001
CLASSIFICATION: <Unknown>
 COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
 NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0356 US
 TOPOLOGY:
 STRANDEDNESS: single
 TYPE: amino acid
 COUNTRY: USA
 STREET:
 TELEX:
 MEDIUM TYPE: Diskette
 Smith, Kelly D.
 Hayashi,
 Application US/10125692 No. US20030044429A1
 TELEFAX: 415-845-4166
 Underhill,
 ENGTH: 237 amino acids
 ELEX: <Unknown>
FOR SEQ ID NO: 32:
CE CHARACTERISTICS:
 TY: Palo Alto
 Conservative
 Alan
 3174 Porter Drive
 BLADNOT 03
 Fumitaka
 linear
 David M.
 Score 18;
Pred. No.
 DB 10;
 .3e+02;
 Length 237;
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 MOLECULE TYPE: per POSITION IN GENOME:
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 ATTORNEY/AGENT INFORMATION:
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 CORRESPONDENCE ADDRESS:
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 TYPE: amino acid
STRANDEDNESS: No.
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 TOPOLOGY:
 NAME: Bugaisky, Lawrence REGISTRATION NUMBER:
 APPLICATION NUMBER: US 0 FILING DATE: 31-OCT-1994
 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
 REFERENCE/DOCKET NUMBER:
 FILING DATE:
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 ADDRESSEE:
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 197 KKINAAATLD 206
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 20005
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 4.
 Similarity
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 Application US/09770621
 491 amino acids
 3: STERNE, KESSLER, GOLDSTEIN & FOX, P.L.L.C 1100 New York Ave., N.W. Suite 600
 mirabilis1
 U.S.A.
 Paloheimo, Marja
Suominen, Pirkko
 Vehmaanper , Jari
Fagerstr m, Richard
 Conservative
 Lahtinen,
 linear
 PatentIn Release #1.0, Version #1.30
 L0024815A1
 peptide
 29-JUL-1994
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 Lawrence B
 , Arja
 Raija
 64.3%;
 US 08/332,412
 US 08/282,001
 08/590,563
 US/09/770,621
 35,086
 .050.0340003
 Score 18; I
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US-10-113-809-3
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US-10-001-879-145
 ; OTHER INFORMATION: Bacterial Toxin Binding Ligand
US-10-113-809-3
 GENERAL INFORMATION: APPLICANT: Maschke, Hans,
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SOFTWARE: PatentIn version 3.1
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 PPLICANT:
 APPLICANT:
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 Sun, Yongming
 Cafferkey, Robert
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 Macina, Roberto
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 Susana
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Pred. No.
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 .5e+02;
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Best Local Similarity
Thes 4; Conserve
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US-09-729-674-76
 ; OTHER INFORMATION: Truncated bacterial sequence
US-09-465-714-4
 US-09-729-674-76
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Best Local Similarity 40.u
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 SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 4
 SOFTWARE: PE
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 Sequence 4, Application US/09465714 Publication No. US20030032582A1
 Patent No.
 CURRENT APPLICATION NUMBER: US/09/729,674
CURRENT FILLING DATE: 2000-12-04
PRIOR APPLICATION NUMBER: 09/539,330
PRIOR FILING DATE: 2000-03-30
 APPLICANT: Wahlsten, Jennifer L. APPLICANT: Ramakrishnan, S. APPLICANT: Schlievert, Patrick
 APPLICANT: Fechtel, Kim

APPLICANT: Genetics Institute, Inc.

TITLE OF INVENTION: SECRETED PROTEINS AND POLYNUCLEOTIDES ENCODING THEM FILE REFERENCE: 6055-64X
 CURRENT FILING DATE:
 APPLICANT: Ramakrishnan, S.
APPLICANT: Schlievert, Patrick M.
TITLE OF INVENTION: SPONTANEOUS MEMBRANE INSERTION
 PRIOR FILING DATE: 2000-03-30
NUMBER OF SEQ ID NOS: 283
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 Clark, Hilary
 Wong, Gordon G.
 Steininger II, Robert J. Spaulding, Vikki
 Treacy, Maurice
Agostino, Michael J
 Evans, Cheryl
 Collins-Racie, Lisa
 Merberg,
 Lavallie, Edward R.
 60.7%; ilarity 40.0%; Conservative
 John
 1998-12-31
 David
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30 KKSVAESMLD 39

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 밁
 Ş
 ; OTHER INFORMATION: Hybrid containing bacterial and mammalian sequence US-09-465-714-2
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CURRENT FILING DATE: 1999-12-17
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APPLICANT: SCHILEVET, PATTICK M.
TITLE OF INVENTION: SPONTANEOUS MEMBRANE INSERTION
FILE REFERENCE: 09531/003001
 APPLICANT: Wahlsten,
 APPLICANT: Wahlsten, Jennifer L.
 NUMBER OF SEQ ID NOS:
 PRIOR APPLICATION NUMBER: 09/001,593 PRIOR FILING DATE: 1998-12-31
 NPPLICANT: Schlievert, Patrick M.
IITLE OF INVENTION: SPONTANEOUS MEMBRANE INSERTION
ILE REFERENCE: 09531/003001
 LENGTH: 194
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 3 KKXXXXXXID 12
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40.0%;
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 US-09-870-759-18
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CURRENT FILING DATE: 2002-01-14
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 E: John Moran
US Army MRMC
 233
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 Sina Bavari
 Robert G. Ulrich,
 (301) 619-2065
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 Unknown
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 2002-01-
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 60.7%;
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 26,313
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US-10-002-784A-12
 US-10-002-784A-12
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 ; OTHER INFORMATION: Hybrid containing bacterial and US-09-465-714-1
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TITLE OF INVENTION: Bacterial Superantigen Vaccines
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CURRENT FILING DATE: 2001-11-26
 APPLICANT: Ramakrishnan, S.
APPLICANT: Schilevert, Patrick M.
TITLE OF INVENTION: SPONTANEOUS MEMBRANE INSERTION
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| •••    | conserved hypothet | toxic shock syndro | toxic shock syndro | hypothetical prote | ribose-5-phosphate | heat shock protein | probable transcrip | transcription regu | conserved hypothet | 3-methyladenine DN | . H+-transporting tw . | cyclic nucleotide- | probable camp-depe | hypothetical prote | hypothetical prote |  |

## ALIGNMENTS

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C;Accession: E84806
R;Lin, X.; Kaul, S.; Rounsley, S.D.; Shea, T.P.; Benito, M.I.; LUWII, L.T., Tall M.; Koo, H.; Moffat, K.S.; Cronin, L.A.; Shen, M.; Vanaken, S.E.; Umayam, L.; Tall euss, D.; Nierman, W.C.; White, O.; Eisen, J.A.; Salzberg, S.L.; Fraser, C.M.; Ver Nature 402, 761-768, 1999
A;Title: Sequence and analysis of chromosome 2 of the plant Arabidopsis thaliana. A; Nolecule type: DNA
A; Molecule type: DNA
A; Residues: 1-284 <SAU>
A; Cross-references: EMBL: AL133498; PIDN: CAB63496.1;
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A;Accession: T50261
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A;Contents:.annotation; gene organization, sites, features R;Umesono, K.; Inokuchi, H.; Shiki, Y.; Takeuchi, M.; Chang, J. Mol. Biol. 203, 299-331, 1988
A;Title: Structure and organization of Marchantia polymorpha A;Reference number: S01567; MUID:99068686; PMID:2974085
A;Accession: S01876
 B
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 R;Schulte, U.; Algn, V.; submitted to the Protein
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A; Residues: 1-100 < UME>
 R;Ohyama, K.; Fukuzawa, H.; Kohchi, T.; Shirai, H.; Sano, T.; Sano, S.; Umesono, K.; Shi
Nature 322, 572-574, 1986
A;Title: Chloroplast gene organization deduced from complete sequence of liverwort March
A;Reference number: A38014
 submitted to the EMBL Data A; Reference number: A00150 A; Accession: A02733
 C;Species: chloroplast Marchantia polym C;Date: 30-Jun-1987 #sequence_revision
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 U.; Algn, V.; Hoheisel, J.; Brandt, P.; Fartmann, B.; Holland, R.; to the Protein Sequence Database, April 2000
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Chung, M.K.; Hughes, B.;

A967

A.; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; White, Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.;

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 R;Heldelberg, J.F.; Elsen, J.A.; Nelson, W.C.; Clayton, R.A.; Gwinn, M.L.; chardson, D.; Ermolaeva, M.D.; Vamathevan, J.; Bass, S.; Qin, H.; Dragoi, 1 l, R.R.; Mekalanos, J.J.; Venter, J.C.; Fraser, C.M. Nature 406, 477-483, 2000
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A; Cross-references: GB: AE004420;
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 Nucleic Acids Res. 18, 173-180, 1990

Nucleic Acids Res. 18, 173-180, 1990

A;Title: Nucleotide sequence of the mitochondrial genome of Param A;Reference number: S07725; MUID:90174913; PMID:2308823

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A;Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, E. C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Lurs, J.S.; Maiti, R.; Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H. A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W. A;Title: Sequence and analysis of chromosome 1 of the plant Arabidopsis., A;Reference number: A86141; MUID:21016719; PMID:11130712
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R;Perna, N.T.; Plunkett III, G.; Burland, V.; Mau, B.; Glasner, J.D.; Rose, D.J.;
iller, L.; Grotbeck, E.J.; Davis, N.W.; Lim, A.; Dimalanta, E.; Potamousis, K.; Ar
Nature 409, 529-533, 2001
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 C; Keywords: DNA binding; transcription regulation
F; 39-58/Region: helix-turn-helix motif
 Science 277, 1453-1462, 1997

A;Title: The complete genome sequence of Escherichia coli K-12
A;Reference number: A64720; MUID:97426617; PMID:9278503
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 A;Authors: Gnehm, C.L.; McDonald, L.A.; Small, K.V.; Fraser, C.M.; A;Title: Whole-genome random sequencing and assembly of Haemophilus A;Reference number: A64000; MUID:95350630; PMID:7542800
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protein

DKFZp566E144.1 -

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hypothetical protein 6 - Chlamydia trachomatis (serotype D) plasmid pCHL1 C;Species: Chlamydia trachomatis C;Decies: Chlamydia trachomatis C;Date: 17-Apr-1993 #sequence_revision 17-Apr-1993 #text_change 17-Feb-19 C;Accession: F37386
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 A; Title: Analysis of the entire nucleotide sequence of the A; Reference number: S00788; MUID:88233998; PMID:2836808 A; Accession: S00794
 C; Species: Homo sap
C; Date: 20-Sep-1999
 A;Title:
 R; Comanducci,
 F37386
 RESULT 14
 A; Cross-references: EMBL: X06707
 A; Molecule type: DNA
A; Residues: 175-247 <HAT>
 N; Alternate names: hy C; Species: Chlamydia
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 S
 C; Superfamily:
 A; Status: preliminary
A; Molecule type: mRNA
A; Residues: 1-237 <BLO>
 R; Bloecker, H.; Boecher, submitted to the Protein
 C; Accession:
 R; Hatt, C.; Ward, M.E.;
Nucleic Acids Res. 16, 4
 A; Note:
 A; Experimental source: plasmid
 A; Reference number: S01920;
A; Accession: S01924
 A; Note: DKF2p566E144.1
 A; Reference number: A; Accession: T14770
 A; Experimental source: plasmid pLGV440
 A;Cross-references: EMBL:X07547; NID:g40730; PIDN:CAA30426.1; PID:g581014
 hypothetical protein 6 - Chlamydia trachomatis plasmids N; Alternate names: hypothetical protein P-10
 A; Cross-references: EMBL: AL110239
 Genetics:
 ;Title: The structure of a plasmid of Chlamydia trachomatis believed to be Reference number: S01920; MUID:89013895; PMID:2845228
 Comanducci, M.; Ricci,
 Accession: S01924;
 Date: 31-Mar-1990 #sequence_revision
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 S.; Ratti, G.
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R; Wood, D.W.; Setupal, J.L., March, C.; Guenthner, Ferage, G.; Gillet, W.; Grant, C.; Guenthner, F.; Karp, P.; Romero, P.; Zhang, S. Science 294, 2317-2323, 2001

Science 294, 2317-2323, 2001
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 A; Authors: Yoo, H.; Tao, Y.; Biddle, P.; Jung, M.; K
ster, E.W.
A; Title: The Genome of the Natural Genetic Engineer
A; Reference number: AB2577; PM[D:11743193
 A;Reference number: A37386; MUID:90301796; PMID:2194229
A;Accession: F37386
A;Status: preliminary
 hypothetical protein Atu4350 [imported] - Agrobacterium tumefaciens (strain C;Species: Agrobacterium tumefaciens C;Date: 11-Jan-2002 #sequence_revision 11-Jan-2002 #text_change 11-Jan-2002
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 A;Cross-references: GB:AE008689; | A;Experimental source: strain C58
 A; Molecule type: DNA
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C;Genetics:
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AMPX_ODOS10
AMPX_DROME
BRCE_MYCGE
RP1A_BUCAI
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NIJ1_HUMAN
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InterPro; IFR001209; Ribosomal_S14.
Pfam; PF00253; Ribosomal_S14; 1.
PROSITE; PS00527; RIBOSOMAL_S14; 1.
Ribosomal protein; Chloroplast.
SEQUENCE 100 AA; 11880 MW; 5AB14F
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| anabaena sp | Q8у×02 | LEU2_ANASP | ᆫ                                            | 467 | 60.7 | 17 | 5  |
| streptomyce | P52320 | PRTC_STRGR | Н                                            | 457 | 60.7 | 17 | 44 |
| mycoplasma  | P75142 | YB44_MYCPN | Н                                            | 413 | 60.7 | 17 | 3  |
| archaeoglob | 028380 | YI99_ARCFU | Н                                            | 399 | 60.7 | 17 | 12 |
| arabidopsis | Q39055 | CNX2_ARATH | <b>_</b>                                     | 390 | 60.7 | 17 | 1  |
| helicobacte | Q9zml6 | DXR_HELPJ  | _                                            | 368 | 60.7 | 17 | 0  |
| aspergillus | P87256 | LE3A_ASPNG | ᆫ                                            | 363 | 60.7 | 17 | 39 |
| mycoplasma  | P75593 | YA99_MYCPN | Н                                            | 347 | 60.7 | 17 | 38 |
| neisseria m | Q9k0c7 | ERA_NEIMB  | <u>,                                    </u> | 307 | 60.7 | 17 | 37 |
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| oncorhynchu | 091205 | MYO1_ONCMY | _                                            | 276 | 60.7 | 17 | 35 |
| campylobact | Q9pnj2 | TRUB_CAMJE | Н                                            | 272 | 60.7 | 17 | 34 |
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## ALIGNMENTS

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| P06370;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| 01-JAN-1988 (Rel. 06, Last sequence update)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
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| Marchantia polymorpha (Liverwort).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Chloroplast.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Marchantiophyta;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Marchantiopsida; Marchantiidae; Marchantiales; Marchantiineae;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
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| NCBI_TaxID=3197;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| MEDITINE ESON N.A.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Umesono K., Inokuchi H., Ohyama K., Ozeki H.;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| "Nucleotide sequence of Marchantia polymorpha chloroplast DNA: a                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| region possibly encoding three tRNAs and three proteins including a                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| SEQUENCE FROM N.A.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Ohyama K., Fukuzawa H., Kohchi T., Shirai H., Sano T., Sano S.,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Chang Z., Aota S., 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Ozeki H.;                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| "Chioropiase gene organization deduced from complete sequence or liverwort Marchantia polymorpha chloropiast DNA.";                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Nature 322:572-574(1986).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| -1- SIMILARITY: BELONGS TO THE S14P FAMILY OF RIBOSOMAL PROTEINS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| This SWISS-PROT entry is copyright. It is produced through a collaboration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| between the Swiss Institute of Bioinformatics and the EMBL outstation -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| European Bioinformatics Institute. There are no restrictions on                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| modified and this statement is not removed. Heade by and for commercial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| or send an email to incensegisb'sib.ch).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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 *Mechanism of homophilic binding mediated by ninjurin, expressed adhesion molecule."

J. Biol. Chem. 272:21372-2222
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 "The human homologue of the ninjurin gene
 promotes axonal
 Araki T., Milbrandt
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 NCBI_TaxID=9606
 Homo sapiens (Human)
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 Ninjurin, a novel adhesion molecule,
 BIOI. Chem. 272:21373-21380(1997).
FUNCTION: HOMOPHILIC CELL ADHESION MOLECULE THAT PROMOTES AXONAL GROWTH. MAY PLAY A ROLE IN NERVE REGENERATION AND IN THE FORMATION AND FUNCTION OF OTHER TISSUES. CELL ADHESION REQUIRES DIVALENT
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 47:58-63(1998).
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 "Mus musculus ninjurin genomic DNA.";
Submitted (DEC-1999) to the EMBL/GenBank/DDBJ databases.
-i- FUNCTION: HOMOPHILIC CELL ADHESION MOLECULE THAT PROMOTES
GROWTH. MAY PLAY A ROLE IN NERVE REGEMERATION AND IN THE E
AND FUNCTION OF OTHER TISSUES. CELL ADHESION REQUIRES DIVE
 "The human homologue of the ninjurin gene maps of hereditary sensory neuropathy type I (HSNI). Genomics 47:58-63(1998).
 SEQUENCE FROM N.A.
MEDLINE-98126436; PubMed-9465296;
Chadwick B.P., Heath S.K., Williamson
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 promotes axonal growth.";
 "Ninjurin, a novel adhesion molecule,
 Araki T., Milbrandt
 SEQUENCE FROM N.A. MEDLINE-96374367;
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Kinura S., Kitagawa M., Makino K., Masuda S., Miki T., Mizobuchi K.,
Mori H., Motomura K., Nakamura Y., Nashimoto H., Nishio Y., Saito N.,
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Yano M., Horiuchi T.;
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-1- SIMILARITY: BELONGS
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 "Nucleotide sequence of the
 MEDLINE-90174913; PubMed-2308823;
Pritchard A.E., Seilhamer J.J., M
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 TFOX_HAEIN P43779;
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 Taulty J.J., Barcak G.J.;
"Identification of a DNA transformation gene expression and supertransformer phenotype in influenzae.";
 EcoGene; EG12301; ycdc.
InterPro; IPR001647; HT
Pfam; PF00440; tetR; 1.
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 Williams P.M.,
 IDENTIFICATION OF TFOC AS SXY, AN MEDLINE-95050244; PubMed-7961436;
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 SEQUENCE FROM N.A.
STRAIN-Rd / KW20 / ATCC 51907;
STRAIN-P95350630; Pubmed-7542800;
 DNA transformation protein TFOX OR SXY OR HI0601.
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 PROSITE; PS01081; HTH_TETR_FAMILY; FHypothetical protein; Transcription
 SEQUENCE FROM N.A.
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 "Whole-genome random sequencing and
 MEDLINE-95241551; PubMed-7724607;
 NCBI_TaxID=727;
 Bacteria; Proteobacteria;
 Haemophilus influenzae.
 Complete proteome.
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 ne essential for competence.";
Bacteriol. 176:6789-6794(1994).
- FUNCTION: REQUIRED FOR DNA TRANSFORMATION.
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 Nguyen L.H., Erzberger J.P., Root J., Wi
"The human homolog of Escherichia coli O
single-stranded RNA and DNA oligomers.",
J. Biol. Chem. 275:25900-25906(2000).
-I- FUNCTION: 3'-TO-5' EXORIBONUCLEASE S
 Wiemann S., Weil B., Wellenreuther R., Gassenhuber J., Glass! (Ansorge W., Boecher M., Bloecker H., Bauersachs S., Blum H., Lauber J., Duesterhoeft A., Beyer A., Koehrer K., Strack N., Mewes H.-W., Ottenwaelder B., Obermaier B., Tampe J., Heubner I Wambutt R., Korn B., Klein M., Poustka A.;
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 SEQUENCE FROM N.A. (SHORT ISOFORM).

MEDLINE=20272150; PubMed=10810093;

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"Identification of novel human genes evolutionarily
Caenorhabditis elegans by comparative proteomics.";
Genome Res. 10:703-713(2000).
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16-OCT-2001 (Rel. 40, Last annotation update)
Virulence plasmid protein pGP6-D (Protein P-10).
Chlamydia trachomatis.
Plasmid pLGV440, Plasmid pCHLL, and Plasmid pCTT1.
Bacteria; Chlamydiales; Chlamydiaceae; Chlamydia.
 the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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 STRAIN-L1/440/LN; PLASMID-PLGV440; MEDLINE-88233998; PubMed-2836808; Hatt C., Ward M.E., Clarke I.N.; "Analysis of the entire nucleotide Chlamydia trachomatis serovar L1. E
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SUBUNIT: HOMOTETRAMER (PROBABLE).
SUBCELLULAR LOCATION: MITOCHONDRIAL (LONG ISOFORM)
 ALTERNATIVE PRODUCTS:
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IND-89013895; PubMed-2845228;
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structure of a plasmid of Chlamydia trachomatis believed ired for growth within mammalian cells.";
Microbiol. 2:531-538(1988).
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01-OCT-1996 (Rel. 3
 Plasmid.
VARIANT
 STRAIN-Serotype B; PLASMID-PO
MEDLINE-88177106; PubMed-3444
Sriprakash K.S., Macavoy E.S
 SEQUENCE FROM N.A. MEDLINE-92115571; PubMed-Linderoth N.A., Ziermann
 VARIANT
VARIANT
 of Chlamydia trachomatis."; Plasmid 18:205-214(1987).
 Comanducci M., Ricci S., Cevenini R., Re "Diversity of the Chlamydia trachomatis with different pathogenicity.";
 MEDLINE-90301796;
 Bacteriophage P2:
Viruses; dsDNA viruses,
P2-like viruses.
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 This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the El
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 Pfam; PF03677;
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 -!- SIMILARITY:
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"Nucleotide sequence of bacteriophage P2."
 NCBI_TaxID=10679;
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 EMBL; AF221596; AAA62396.1; -.
 or send an email to license@isb-sib.ch).
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 01-NOV-1995 (Rel.
01-NOV-1995 (Rel.
16-OCT-2001 (Rel.
 EMBL; AF063097; AAD03268.1; -. PIR; S16410; S16410. PIR; S2796; S22796. Caps1d assembly.
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 PRINTS;
 Belas
 NCBI_TaxID=584;
 Proteus
 Bacteria; Proteobacteria;
 Proteus mirabilis.
 SEQUENCE
 [nterPro;
 MEDLINE-95011656; PubMed-7926835
 SEQUENCE FROM N.A.,
 P42272;
 FLC1_PROMI
 Sequence and genetic analysis of multiple flagellin-encoding genes
 Local Similarity
 INDUCTION: ALTHOUGH SWIMMER CELLS HAVE ONLY A FEW FLAGELLA, ELONGATED SWARMER CELLS ARE PROFUSELY COVERED BY THOUSANDS FLAGELLA SYNTHESIZED SPECIFICALLY IN RESPONSE TO GROWTH ON SURFACES OR IN HIGHLY VISCOUS LIQUIDS.

SIMILARITY: BELONGS TO THE BACTERIAL FLAGELLIN FAMILY.
 leic acids res. 19:7207-7214(1991).

FUNCTION: THE Q, P AND M PROTEINS ARE NEEDED TO PACKAGE DNA INTO PROHEADS AND FOR THE CONVERSION OF PROHEADS TO CAPSIDS.

SIMILARITY: STRONG, TO PHAGE HP1 PROTEIN ORRIS AND TO THE E.COLI HYPOTHETICAL 36.8 kDa PROTEIN (ORF5) IN RETRON EC67.
 FUNCTION: FLAGELLIN IS THE SUBUNIT PROTEIN WHICH POLYMERIZES FORM THE FILAMENTS OF BACTERIAL FLAGELLA.
 SWISS-PROT entry is copyright. It is produced through een the Swiss Institute of Bioinformatics and the El
 148:33-41(1994)
 PF00669; Flagellin_N; 1. pF00700; Flagellin_C; 1. S; PR00207; FLAGELLIN.
 Proteus mirabilis.";
 270 KKASAADLLD 279
 R., Flaherty
 KKXXXXXXLD
 IPR001492; FlagellinN. IPR001029; Flagellin_C
 344 AA;
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 AND SEQUENCE
 39114 MW;
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 Schizosaccharomyces pombe (Fission yeast).
Eukaryota; Fungi; Ascomycota; Schizosaccharomycetes;
Schizosaccharomycetales; Schizosaccharomycetaceae;
Schizosaccharomyces.
 Flagella; Multigene family. SEQUENCE 365 AA; 39093 MW;
 ACT12 OR SPAC630.03.
 01-OCT-1993 (Rel. 27, Last sequence update) 15-JUN-2002 (Rel. 41, Last annotation updat
 P32390;
01-OCT-1993
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 Hypothetical SEQUENCE 4:
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 01-NOV-1997
16-OCT-2001
MEDLINE=92108083;
Lees-Miller J.P.,
 SEQUENCE FROM N.A.
 NCBI_TaxID=4896;
 ARP3
 EMBL; AE000029; AAB95965.1; -.
 or send an email to license@isb-sib.ch).
 Nucleic Acids Res. 24:4420-4449(1996).
 "Complete sequence pneumoniae.";
 Herrmann R.;
 Himmelreich R.,
 STRAIN=ATCC 29342 / M129;
MEDLINE=97105885; PubMed=8948633;
 SEQUENCE FROM N.A.
 Bacteria; Firmicutes; Mollicutes; Mycoplasmataceae; Mycoplasma
 Hypothetical pr
MPN525 OR MP317
 01-NOV-1997
 NCBI_TaxID=2104;
 Mycoplasma pneumoniae
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nes 4; Conserv
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 Collins M., Connor R., Cronin A., Davis P., Feltwell T., Fraser A., Rollins M., Gonlor R., Hamlin N., Harris D., Hidalgo J., Hodgson G., A. Holroyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K., A. Holroyd S., Hornsby T., Howster S., McDonald S., McLean J., R. James K., Jones L., Jones M., Leather S., McDonald S., McLean J., R. Mooney P., Moule S., Mungall K., Murphy L., Niblett D., Odell C., R. Mooney P., Moule S., Mungall K., Murphy L., Niblett D., Odell C., R. Mooney P., Moule S., Mungall K., Murphy L., Niblett D., Odell C., R. Mooney P., Moule S., Marchard J., Volchert S., Saunders D., Seeger K., Sharp S., R. Kelton J., Simmonds M., Squares R., Squares S., Stevens K., Sharp S., Ra Haylor K., Taylor R.G., Tivey A., Walsh S.V., Warren T., Whitehead S., R. Weltjens I., Vanstreels E., Rieger M., Schaefer M., Weller-Auer S., R. Meltjens I., Vanstreels E., Rieger M., Schaefer M., Hilbert H., Ra Gabel C., Fuchs M., Fritzc C., Holzer E., Moestl D., Hilbert H., Ra Borzym K., Langer I., Beck A., Lehrach H., Reinhardt R., Pohl T.M., Ra Goffeau A., Cadieu E., Dreano S., Gloux S., Lelaure V., Mottier S., Galibert F., Aves S.J., Xiang Z., Hunt C., Moore K., Hurst S.M., Lucas M., Rochet M., Galllardin C., Tallada V.A., Garzon A., Thode G., Dagar R.R., Cruzado L., Jimenez J., Sanchez M., del Rey F., Benito J., Dagar C., Wolfer H., R., Paulsen I., Potashkin J., The genome sequence of Schizosaccharomyces pombe. ";

"The genome sequence of Schizosaccharomyces pombe.";

"The genome sequence of Schizosaccharomyces pombe.";
 Query Match
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XYNA_STRLI S
P26514; P96464;
01-AUG-1992 (Rel
30-MAY-2000 (Rel
 EMBL;
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 STRLI
 Pfam; PF00022; actin; 1
SMART; SM00268; ACTIN;
 Sgouros J., Peat N., Hayles J., Baker S., Basham D., Bowman Brooks K., Brown D., Brown S., Chillingworth T., Churcher C
 "Identification of act2, an essential gene in the fission yeast Schizosaccharomyces pombe that encodes a protein related to actin."; proc. Natl. Acad. Sci. U.S.A. 89:80-83(1992).
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 SEQUENCE FROM N.A.
 PIR; A41790; A41790.
InterPro; IPR004000; Actin_like
 Wood V.,
 MEDLINE-21848401;
 SUBUNIT: BELONGS TO A COMPLEX COMPOSED OF ARP2, ARP3, P4. P34-ARC, P21-ARC, P20-ARC AND P16-ARC (BY SIMILARITY). SIMILARITY: BELONGS TO THE ACTIN FAMILY. ARP3 SUBFAMILY.
 CYTOKINESIS.
SUBUNIT: BELONGS TO A COMPLEX COMPOSED P34-ARC, P21-ARC, P20-ARC AND P16-ARC
 POLYMERIZATION IN CELLS
 M81068; -; NOT_ANNOTATED_CDS.
AL109832; CAB52725.1; -.
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 Similarity
 KKASAGYSLD
 KKXXXXXXLD
 PS01132; ACTINS_ACT_LIKE; 1
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427 AA;
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 PubMed-11859360;
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47373 MW; C7909FFEE544789B CRC64;
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 Derewenda U., Swenson L., Green R., Wei Y.Y., Morosoli R., Shareck F., Rluepfel D., Derewenda Z.S.;

"Crystal structure, at 2.6-A resolution, of the Streptomyces lividans xylanase A, a member of the F family of beta-1,4-D-glycanases.";

J. Biol. Chem. 269:20811-20814(1994).

-I- FUNCTION: CONTRIBUTES TO HYDROLYSE HEMICELLULOSE, THE MAJOR COMPONENT OF PLANT CELL-WALLS. XLNA AND XLNB SEEM TO ACT SEQUENTIALLY ON THE SUBSTRATE TO YIELD XYLOBIOSE AND XYLOSE
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 "Sequences of three genes
 15-JUN-2002 (Rel. 41, Last annotation u
Endo-1,4-beta-xylanase A precursor (EC
(1,4-beta-D-xylan xylanohydrolase A).
 InterPro; IPR001000; Glyco_hydro_10.
InterPro; IPR000772; Ricin_B_lectin.
Pfam; PF00331; Glyco_hydro_10; 1.
Pfam; PF00652; Ricin_B_lectin; 3.
 PDB; 1xAS; 31-MAY-95.
InterPro; IPR001000; InterPro; IPR000772;
 the European Bioinformatics Institute. There are no resuse by non-profit institutions as long as its content modified and this statement is not removed. Usage by a
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 MEDLINE-94342232; PubMed-8063693
 Submitted (JUL-1998) to the EMBL/GenBank/DDBJ databases
 REVISIONS TO 20 AND 140-141
STRAIN-66 / 1326;
 Gene 107:75-82(1991).
 STRAIN=66 / 1326;
MEDLINE=92077439; PubMed=1743521;
 SEQUENCE FROM N.A.,
 NCBI_TaxID=1916;
 Actinomycetales;
 Bacteria; Actinobacteria;
 Streptomyces lividans.
 PROSITE; PS00591; GLYCOSYL_HYDROL_F10; PROSITE; PS50231; RICIN_B_LECTIN; 1.
 EMBL; M64551; AAC26525.1; PIR; JS0589; JS0589.
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 -i- PATHWAY: Xylan
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 Kylan degradation;
 PRINTS;
 PIR; JS0589;
 PATHWAY: Xylan degradation.
SUBCELLULAR LOCATION: Secre
SIMILARITY: BELONGS TO CELL
 AS CARBON SOURCES.
CATALYTIC ACTIVITY:
linkages in xylans.
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 pacteria; Actinobacteria (class); Actinobacteridae;
Streptomycineae; Streptomycetaceae; Streptomyces.
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51162 MW;
 Hydrolase; Glycosidase;
 AND
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genes specifying
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 Score 18;
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 Pred. No. 19;
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E14A7FE37BDC68CC CRC64;
 Morosoli R., Kluepfel D.;
Fying xylanases in Streptomyces
Mismatches
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 Pfam; PF00004; AAA; 2.

SMART; SM00382; AAA; 2.

PROSITE; PS00674; AAA; 1.

Hypothetical protein; ATP-binding; Repeat.

NP_BIND 246 253 ATP (POTENTIA NP_BIND 574 581 ATP (POTENTIA NP_BIN
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 EMBL, Z73139; CAA97483.1; -.
SGD; SO03957; YLL034C,
InterPro; IPR00359; AAA_ATPase.
InterPro; IPR003959; AAA_ATPase_Centr.
InterPro; IPR003950; AAA_sub.
 YIJ34_YEAST STANDARD; PRT; 837 AA. Q07844; Q1-NOV-1997 (Rel. 35, Created) 01-NOV-1997 (Rel. 35, Last sequence update) 01-NOV-1997 (Rel. 35, Last annotation update) Hypothetical 93.1 kDa protein YILO34C.
 Saccharomyces cerevisiae (Baker's yeast).
Eukaryota; Fungi; Ascomycota; Saccharomycetiaes;
Saccharomycetales; Saccharomycetaceae; Saccharomyces.
NCBI_TaxID=4932;
 SEQUENCE FROM N.A.
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ATP (POTENTIAL).
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sp_fungi:*
 sp_organelle:*
 sp_phage:*
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 Q9zvh8 arabidopsis
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Q37174 bamboo mosa
Q65005 bamboo mosa
Q8uz48 bamboo mosa
Q8uz48 bamboo mosa
Q9zg37 chlamydia t
Q8rtc9 escherichia
Q9ans7 vibrio harv
Q8wuv5 homo sapien
Q9k132 vibrio chol
Q04541 arabidopsis
Q9d84 mus musculu
Q8x4z7 escherichia
Q9609 entamoeba h
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#### ALIGNMENTS

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| 179 KKTSTGSALD 188 | 3 KKXXXXXLD 12 | Query Match 67.9%; Score 19; DB 3; Length 284;<br>Best Local Similarity 40.0%; Pred. No. 20;<br>Matches 4; Conservative 0; Mismatches 6; Indels 0; Gaps 0; | SEQUENCE 284 AA; 31878 MW; A10F14DDE2FA0235 CRC64; | 197 201 | etical protein. | SMART; SM00443; G-patch; 1. | pfam: PF01585; G-patch: 1 | EMBL; AL133498; CAB63496.1; | 3C-1999) to the EMBL/GenBank/DDBJ databases. | Saunders D., Harris D., McDougall R.C., Rajandream M.A., Barrell B.G.: | STRAIN-972 | SECULENCE FROM N.A. |     | NOBI TRATIDEARAGE | Schizopaccharomycea. | Schipopagnchapomyrophaleas Schipopagnchapomyrophapomae | SCHIZOSACCHAIOMYCES DOMDE (FISSION YEAST) | SPAC890.05. | -  | 17, | (TrEMBLrel. 13, | 01-MAY-2000 (TrEMBLrel. 13, Created) | •• | Q9URX9 PRELIMINARY; PRT; 284 AA. | XX4 +  |       |
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Putative elongation factor.
 SEQUENCE FROM N.A. Yamada K., Banh J., Cheng J.M., Goldsmith F. Tang C., Toriumi M., F.
 Deng J.M.
Tang C.,
Carninci
 Q9ZVH8;
Q9ZVH8;
01-MAY-1999
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01-MAR-2002
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheop
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
eurosids II; Brassicales; Brassicaceae; Arabidopsis.
 Elongation SEQUENCE
 Arabidopsis thaliana (Mouse-ear cress).
 SMART; SM00510; TFS2M; 1.
SMART; SM00509; TFS2N; 1.
SMART; SM00440; ZnF_C2C2; 1.
PROSITE; PS00466; TFIIS; 1.
 NCBI_TaxID=3702;
 AT2G38560
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 Submitted (MAR-2000) to the EMBL/GenBank/DDBJ EMBL; AC005499; AAC67362.1; -.
 Adams M.D., Carrera A.J.
Copenhaver G.P., Preuss
Salzberg S.L., Fraser C.
 STRAIN-CV. COLUMBIA;
MEDLINE-20083487; PubMed-10617197;
MEDLINE-20083487; Rounsley S.D., Shea T.P.,
Lin X., Kaul S., Rounsley S.D., Shea T.P.,
Fujii C.Y., Mason T.M., Bowman C.L., Barnst
Buell C.R., Ketchum K.A., Lee J.J., Ronning
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Eukaryota; Viridiplantae; Streptophyta; Embry.
Spermatophyta; Magnollophyta; eudicotyledons;
eurosids II; Brassicales; Brassicaceae; Arabic
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InterPro; IPRO03618; TFS2_centre.
InterPro; IPRO03617; TFS2_N.
Pfam; PF01096; TFIIS; 1.
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 Retchum K.A., Lee J.J., Ronning C.M., Koo H., Moffat K.S., Shen M., Vanaken S.E., Umayam L., Tallon L.J., Gill J.E., Carrera A.J., Creasy T.H., Goodman H.M., Somerville C.R., G.P., Preuss D., Nierman M.C., White O., Eisen J.A., L., Fraser C.M., Venter J.C.; nd analysis of chromosome 2 of the plant Arabidopsis
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Meyers M.C., Miranda M., Narusaka M., Na
Sakurai T., Satou M., Seki M., Shinn P.,
Davis R.W., Ecker J.R., Theologis A.;
"Full Length cDNA of gene At2g38560 (GI.
Submitted (JAN-2002) to the EMBL/GenBanl
EMBL; AY074322; AAL67018.1;
InterPro; IPR001222; TFIIS.
InterPro; IPR0035618; TFS2_centre.
InterPro; IPR003617; TFS2_N.
Pfam, PF01096; TFIIS; 1.
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 Elongation SEQUENCE
SEQUENCE FROM N.A.
 Viruses; ssRNA po
NCBI_TaxID=35286;
 Bamboo mosaic virus.
Viruses; ssRNA positive-strand
 Pfam;
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 Liao J.T., Hsu Y.H.; "Full-length sequence of infectious bamboo mosaic virus genomic RNA."; Submitted (AUG-1997) to the EMBL/GenBank/DDBJ databases.
EMBL; AF018156; AAB70562.1;
 SMART; SM00510; TES2M; 1.
SMART; SM00509; TES2N; 1.
SMART; SM00440; ZnF_C2C2; 1.
PROSITE; PS00466; TFIIS; UNKNOWN_1.
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STRAIN-S;
 InterPro; IPR001788; RNA_dep_RNApol2.
InterPro; IPR000606; Viral_helicase1.
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 PF00978; RNA_dep_RNApol2; 1.
PF01443; Viral_helicasel; 1.
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01-MAY-1999 (TrEMBLrel. 10, Created)
01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update
Hypothetical 5.2 kDa protein (Fragment).
Chlamydia trachomatis.
Plasmid pCHLI.
Bacteria; Chlamydiales; Chlamydiaceae; Chlamydia.
NCBI_TaxID-813;
[1]
 Yang C.-C., Liu J.-S., Lin C.-P., Lin N.-S.;
"Nucleotide sequence and phylogenetic analysis
potexvirus isolate from common bamboo (Bambuse
Submitted (DEC-2001) to the EMBL/GenBank/DDBJ
EMBL; L77962; AAL40030.1; -
 Putative, putative, putative, putative, Bamboo mosaic virus.
Viruses; ssRNA positive-strand viruses,
 Pfam; PF00978; RNA_dep_RNApol2; Pfam; PF01443; Viral_helicase1;
 Lin N., Lin B., Lo N., Hu C., Chow T., F
"Nucleotide sequence of the genomic RNA
J. Gen. Virol. 75:2513-2518(1994).
EMBL; D26017; BAA05033.1;
InterPro; IPR001788; RNA_dep_RNApol2.
InterPro; IPR000606; Viral_helicase1.
 InterPro; IPR001788; RNA_dep_RNApol2.
InterPro; IPR000606; Viral_helicasel.
Pfam; PF00978; RNA_dep_RNApol2; 1.
Pfam; PF01443; Viral_helicasel; 1.
 01-MAR-2002 (TrEMBLrel. 20, Created)
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 STRAIN-BAMV-O;
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 MEDLINE-94358760; PubMed-8077956;
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 EMBL; AF087330; AADÓ4105.1; -... Interpro; IPR005350; UPF0137. Pfam; PF03677; UPF0137; 1... Hypothetical protein; Plasmid.
 Submitted (AUG-1998) to the EMBL/GenBank/DDBJ databases EMBL: AF087330; AAD04105.1; -.
 sequencing."
 SEQUENCE FROM N.A.
 Vibrio harveyi.
Bacteria; Proteobacteria;
 01-JUN-2001
01-JUN-2001
 Q9ANS7
 Pradel N., Leroy-Setrin S., Livrelli V.; "Sequences from Shiga toxin-producing Escherichia coli of Submitted (JAN-2002) to the EMBL/GenBank/DDBJ databases
 SEQUENCE FROM N.A. STRAIN-CH014;
 SEQUENCE
 Biochim. Biophys. Acta 0:0-0(2001). EMBL; AF321123; AAK09362.1; -.
 "Cloning and harveyi.";
 SEQUENCE FROM N.A.
Lin Y.H., Miyamoto
 01-JUN-2001
 Q9ANS7;
 EMBL; AF467512; AAL78348.1;
 NCBI_TaxID=562;
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 Wang L., Steenburg
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MEDLINE-20406833; PubMed-10952301;
Heidelberg J.F., Eisen J.A., Nelson W.C., Clayton R.A.,
Dodson R.J., Haft D.H., Hickey E.K., Peterson J.D., Umas
Gill S.R., Nelson K.E., Read T.D., Tettelin H., Richardi
Ermolaeva M.D., Vamathevan J., Bass S., Oin H., Dragoi 1
McDonald L., Utterback T., Fleischmann R.D., Nierman W.C
Salzberg S.L., Smith H.O., Colwell R.R., Mekalanos J.J.,
Fraser C.M.;
 SEQUENCE
 Complete
 cholerae.
 OBWUV5;
01-MAR-2002 (TrEMBLrel. 20, Created)
01-MAR-2002 (TrEMBLrel. 20, Last sequence up
01-MAR-2002 (TrEMBLrel. 20, Last annotation
Hypothetical 17,0 kDa protein (Fragment).
 Nature 406:477-483(2000).
EMBL: AE004419; AAF96814.1;
 Bacteria;
 Vibrio cholerae
 Transcriptional
 01-OCT-2000
01-DEC-2001
 Q9KL32;
01-OCT-2000
 Q9KL32
 Eukaryota; Metazoa;
Mammalia; Eutheria;
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 "DNA sequence of both chromosomes cholerae.";
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 Hypothetical protein.
 EMBL;
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 NCBI_TaxID=9606;
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STRAIN-C57B
 Q9D854;
01-JUN-2001
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 Mus musculus (Mouse).
Eukaryota; Metazoa; C
Mammalia; Eutheria; F
 SEQUENCE
STRAIN-CV
 STRAIN-CV. COLUMBIA;
Osborne B.I., Vysotskala V.S., Toriumi M., Yu G., Oji O.,
Conway A.B., Conway A.R., Dewar K., Feng J., Kim C., Kurtz
Shinn P., Sun H., Davis R.W., Ecker J.R., Federspiel N.A.,
 Q9D8S4
 Submitted (JUN-1997) to the EMBL; AC002062; AAB61109.1; InterPro; IPRO03822; PAH. Pfam; PF02671; PAH; 2. SEQUENCE 171 AA; 19992 M
 Arabidopsis thaliana (Mouse-ear cress).
Eukaryota; Airidiplantae; Streptophyta; Embryophyta;
Spermatophyta; Magnollophyta; eudicotyledons; core eueurosids II; Brassicales; Brassicaceae; Arabidopsis.
 004541;
01-JUL-1997
 NCBI_TaxID=10090;
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 01-JUN-2001 (TrEMBLrel. 17, Created)
01-JUN-2001 (TrEMBLrel. 17, Last sequence update)
01-JUN-2002 (TrEMBLrel. 21, Last annotation update)
1810038015Rik protein (RIKEN cDNA 1810038D15 gene).
 Theologis A.;
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 NCBI_TaxID=3702;
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 from Arabidopsis thaliana chromosome
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Last sequence
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 Score 18;
Pred. No.
 EMBL/GenBank/DDBJ
 Score
Pred.
 Craniata; Vertebrata;
Sciurognathi; Muridae
 PRT;

 Mismatches

 691285E59734CA73
 Mismatches
 No ;
 205
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37;
 DB
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 update)
 10;
 16;
 Muridae;
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 Length 171;
 CRC64;
 Length 161;
 Indels
 oh M., Ishii)
i J., Fukuda 9
S., Yamanaka 1
wa T., Saito H
Casavant T.,
 Indels
 Kurtz D., Li i
 eudicots;
 Euteleostomi;
 Murinae;
 Tracheophyta;
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RESULT
Q8X4Z7
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 Query Match
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Matches 4
 Perna N.T., Plunkett G. III, Burland V., Mau B., Glasner J.D., Rose D.J., Mayhew G.F., Evans P.S., Gregor J., Kirkpatrick H.A., Posfai G., Hackett J., Klink S., Boutin A., Shao Y., Miller L., Grotbeck E.J., Davis N.W., Lim A., Dimalanta E.T., Potamousis K., Apodaca J., Anantharaman T.S., Lin J., Yen G., Schwartz D.C., Welch R.A., Blattner F.R.;

"Genome sequence of enterohaemorrhagic Escherichia coli O157:H7."

Nature 409:529-533(2001).
 Q8X427
Q8X427;
 Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
Lyons P., Marchionni L., Mashima J., Mazzarelli J., Mombaerts P.,
Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
Suzuki H., Toyo-oka K., Wang K.H., Weitz C., Whittaker C., Wilming L.
 Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Q
Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner
Sakai K., Okido T., Furuno M., Aono H., Baldarelli R.,
Blake J., Boffelli D., Bojunga N., Carninci P., de Bona
 MEDLINE-21074935; PubMed-11706eer
 Kuehl P., Lewis
Schriml L.M., S
 Hayashi T., Makino K., Ohnishi M., Kurokawa K., Ishii K., Yokoyama K., Han C.-G., Ohtsubo E., Nakayama K., Murata T., Tanaka M., Tobe T., Iida T., Takami H., Honda T., Sasakawa C., Ogasawara N., Yasunaga T., Kuhara S., Shiba T., Hattori M., Shinagawa H.; "Complete genome sequence of enterohemorrhagic Escherichia coli 0157:H7 and genomic comparison with a laboratory strain K-12."; DNA Res. 8:11-22(2001)
 SEQUENCE FROM N.A. STRAIN-0157:H7 / R
 SEQUENCE FROM
STRAIN-0157:H
 YCDC OR Z1512 OR ECS1259.
Escherichia coli O157:H7.
 01-MAR-2002
01-JUN-2002
 SEQUENCE
 Pfam; PF00929; Exonuclease; 1. SMART; SM00479; EXOIII; 1.
 EMBL; AK007731; BAB25219.1; -.
EMBL; BC003445; AAH03445.1; -.
MGD; MGI:1916430; 1810038D15R1k.
 Submitted (FEB-2001)
 Wynshaw-Boris
 STRAIN-0157:H7 / RIMD 0509952;
MEDLINE-21156231; PubMed-11258796;
 NCBI_TaxID-83334;
 Escherichia
 Bacteria; Proteobacteria;
 YCDC OR Z1512
 Putative tet
 01-MAR-2002
 InterPro; IPR000520; Exonuclease.
 Strausberg R.
 SEQUENCE FROM N.A.
 "Functional annotation of Nature 409:685-690(2001).
 Hayashizaki Y.;
 Fleischmann
 157
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 Similarity
 KKAASHRALD
 KKXXXXXXLD
 205
 (TrEMBLrel. 20, (TrEMBLrel. 20, (TrEMBLrel. 21,
 Σ
 Conservative
 PRELIMINARY;
 operon regulator.
 A., Yoshida K.,
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 Gaasterland T., S., Matsuo Y., 1
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 23613 MW;
 64.3%;
40.0%;
 to the
 of a full-length mouse cDNA collection.";
 gamma
 d T., Gissi C., King
Y., Nikaido I., Pesc
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 Score 18; DB
Pred. No. 43;
 Hasegawa Y., Kawaji H., Kohtsuki S.,
 PRT;
 D3FFF9C7014B730E CRC64;
 subdivision; Enterobacteriaceae;
 Mismatches
 212 AA
 11;
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 Length 205;
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RESULT 15
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Matches 4
 Best
 Matches
 Query Match
 EMBL; AP002554; BAB34682.1; -.
InterPro; IPR001647; HTH_Tetr.
Pfam; PF00440; tetr; 1.
PRINTS; PR00455; HTHTETR.
Complete proteome.
SEQUENCE 212 AA; 23703 MW; 5
 "A new gene family (ariel) encodes asparagine-rich Entamoeba histolytica antigens, which resemble the amebic vaccine candidate serine-rich E. histolytica protein."; Infect. Immun. 66:353-355(1998).

EMBL; AF093575; AAC72364.1; -
SEQUENCE 215 AA; 23641 MW; 00B59B87816A5ECD CRC64;
 Eukaryota; Entamoebidae; NCBI_TaxID=5759;
 01-MAY-1999 (TrEMBLrel.
01-MAY-1999 (TrEMBLrel.
01-MAY-1999 (TrEMBLrel.
 Surface antigen ariell.
 MEDLINE-98084495;
 STRAIN-HM1-IMSS
 SEQUENCE FROM N.A.
 Entamoeba histolytica
 096609;
 096609
 Local
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 Similarity
 Similarity
 Samuelson
KKSSSNSELD
 KKXXXXXXLD
 KKAILSAALD
 KKXXXXXXLD
 Conservative
 PRELIMINARY;
 Conservative
 PubMed-9423879;
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59
 12
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 64.3%;
 64.3%;
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 Entamoeba
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 Last sequence update)
Last annotation update)
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 Score 18;
Pred. No.
 Score 18;
Pred. No.
 5DA47B85C960FD6C CRC64;
 Mismatches
 Mismatches
 215
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 DB 45;
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 Length 215;
 Length 212;
 Indels
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AAR44666 AAR48907 AAR70472 AAR70472 AAR647556 AAR647526 AAR99823 AAR99823 AAR99827 AAR99827 AAR99827 AAR99827 AAR99827 AAR99827 AAR99827 AAR99827 AAR99827 AAR99827 AAR99827 AAR99827 AAR99828 AAR99828 AAR99828 AAR99828 AAR99828 AAR99828 AAR99828 AAR99828 AAR99828 AAR9588

Mutant chemokine a Mutant chemokine a Human IL-16 5' end Platelet targeting LDV-peptide capabl IDA-peptide capabl RGD-peptide capabl Angiotensin II pep Peptide AII(1-3) u

Integrin receptor Anti-inflammatory Anti-inflammatory

Cancer metastasis RF-1 peptide 1 fro HPF3 peptide deriv Platelet-targettin

Non-RGD, non-YISGF Platelet aggregati NL4-3 truncated GA

Active domain from

AAY50604 AAY50605 AAY43493 AAY43494 AAY30549 AAY30593 AAY32860 AAY32872

Anti-inflammatory
Anti-inflammatory
Resin bound cyclic
Resin bound cyclic
Linker for dual av
Linker for dual av
Asparaginyl endope
Amino acid sequenc
Amino acid sequenc
Fibronectin protei
Fibronectin protei
RGD peptide. Unid
Peptide used in th
Trypsin modulating

ALIGNMENTS

Trypsin

modulating

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Title:
Perfect score:
Sequence:
 Minimum
Maximum
 Database
 Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
 Scoring table:
 OM protein -
 Total number of hits satisfying chosen parameters:
 Searched:
 on:
 Pred. No. is the number of results predicted by chance score greater than or equal to the score of the result and is derived by analysis of the total score distribut
 DB DB
 seq
 protein search, using sw model
 A_Geneseq_101002:*

1: /SIDS2/gcgdata/ge
2: /SIDS2/gcgdata/ge
3: /SIDS2/gcgdata/ge
 length: 0
length: 2000000000
 BLOSUM62
Gapop 10.0 , Gapext
 June
 US-09-150-947F-18
17
 10:
111:
113:
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115:
116:
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119:
120:
120:
121:
121:
 908470 seqs, 133250620 residues
 SIDS2/gcgdata/geneseq/geneseqp-embl/AA1980 DAT:

/SIDS2/gcgdata/geneseq/geneseqp-embl/AA1981 DAT:

/SIDS2/gcgdata/geneseq/geneseqp-embl/AA1982 DAT:

/SIDS2/gcgdata/geneseq/geneseqp-embl/AA1983 DAT:

/SIDS2/gcgdata/geneseq/geneseqp-embl/AA1983 DAT:

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/SIDS2/gcgdata/geneseq/geneseqp-embl/AA2000 DAT:
 XXXXXXXXXXX 12
 GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd
 5,
 2003, 15:47:43; Search time 40.7273 Seconds (without alignments)
39.261 Million cell updates/sec
SUMMARIES
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| 1/AA1990 DAT: *      | RESULT 1   | IT T                                                            |
|----------------------|------------|-----------------------------------------------------------------|
| 1/AA1991.DAT:*       | AAP1       | AAP10185                                                        |
| 1/AA1992.DAT:*       | IJ         | AAP10185 standard; Protein; 2 AA.                               |
| 1/AA1993.DAT:*       | XX         |                                                                 |
| 1/AA1994.DAT:*       | Ą          | AAP10185; .                                                     |
| 1/AA1995.DAT:*       | XX         |                                                                 |
| 1/AA1996.DAT:*       | Dī         | 16-AUG-2002 (updated)                                           |
| 1/AA1997.DAT:*       | DĮ.        |                                                                 |
| 1/AA1998.DAT:*       | XX         |                                                                 |
| 1/AA1999.DAT:*       | BG         | Sequence of synthetic polypeptide for the prodn. of aspartame.  |
| 1/AA2000.DAT:*       | ××         |                                                                 |
| 1/AA2001.DAT:*       | KW         | Aspartyl-phenylalanine methyl ester; artificial sweetener;      |
| 1/AA2002.DAT:*       | X X<br>X ¥ | aspartame.                                                      |
| ance to have a       | SO         | Synthetic.                                                      |
| TABLETON             | D.         | FD36358-A                                                       |
|                      | XX         |                                                                 |
|                      | d b        | 23-SEP-1981.                                                    |
|                      | D F        | 02-MAR-1981: 81EP-0300857                                       |
| Description          | ×          |                                                                 |
|                      | PR         | 14-MAR-1980; 80US-0130462.                                      |
| Sequence of synthe   | ××         |                                                                 |
| Trypsin modulating   | PA         | (CETU-) CETUS CORP.                                             |
| Sequence of fragme . | XX         |                                                                 |
| Antiviral agent.     | PI         | ROSE JE, White TJ, Bahl CP;                                     |
| Core repeat of cel   | XX         |                                                                 |
| Harvey Ras inhibit   | DR         | WPI; 1981-72133D/40.                                            |
| Adhesion formation   | DR         | N-PSDB; AAN10059.                                               |
| IgE-mast cell reac   | XX         | •                                                               |
| IgE-mast cell reac   | rg<br>T    | Aspartame prodn. from synthetic polypeptide - produced by clone |
| BCD pentide deriva   | 9          |                                                                 |

Result No.

Score

Query Match

Length

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Ħ AAP10185

AAB37936 AAP40819

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AAR04607 AAR00718 AAR25615 AAR36707 AAR30728 AAR30753

IGE-mast cell reac RGD peptide deriva

P P

Aspartame prodn. from synthetic polypeptide - produced by cloned microorganism

Disclosure; Page 5;

18pp;

English.

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 Query Match
Best Local
 Matches
 alternating double-stranded DNA in which a coding strand has alternating codins for Asp and the Phe in sufficient number to produce a polypeptide which is stable in predetermined host microorganisms. The DNA strand is then inserted into a cloning vehicle so that the resulting chimera directs the synthesis of the Asp-Phe protein. This protein is then cleaved with CNBr or trypsin to release the peptide which, after benzylation, can be fragmented by digestion with chymotrypsin.

(Updated on 16-AUG-2002 to add missing OS field.)
 This invention relates to a trypsin modulating oostatic factor (TMOF) compound. The compound specifically does not include the TMOF analogue peptides represented by AAB37942 - AAB37949. Sequences AAB37940 are TMOF analogues which may be included in the composition. The TMOF compound has pesticidal activity and is an inhibitor of pest digestive enzyme synthesis. The TMOF compound is useful for controlling pests such as mosquito larvae, coleopterans, lepidopterans, dipterans or blood-sucking insects of order Diptera, suborder Nematocera, family
 Colicidae or subfamily
 Claim
 Novel
 WPI; 2000-687156/67.
 Borovsky
 18-APR-2000;
 Synthetic
 pest
 (UYFL) UNIV
 26-OCT-2000
 WO200063233-A2
 Colicidae;
 Trypsin modulating
 Trypsin modulating
 27-FEB-2001
 AAB37936;
 AAB37936 standard;
 epidopteran;
 igestive
 trypsin modulating oostatic factor compound peptides, useful for
control including pests of agricultural crops -
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 12 D
 1;
 Similarity
 Page
 D,
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1
 enzyme synthe:
ran; dipteran;
 Culicinae;
 12
 Linderman
 FLORIDA RES FOUND
NORTH CAROLINA STA
 2000WO-US10235
 (first entry)
 33;
 99US-0295996
 synthesis inhibition; mosquito larvae; coleopteran;
pteran; blood-sucking insect; Diptera; Nematocera;
 50pp;
 oostatic
 oostatic
 peptide;
 35.3%;
 Corethrinae; Ceratopogonidae; Simuliidae.
 Culicinae,
 English.
 N
 STATE
 factor;
 factor
 0
 Score 6;
Pred. No.
 ₽
 Mismatches
 (TMOF) peptide
 TMOF; pesticide;
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 Length 2;
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 pest control;
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Indels

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Gaps

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RESULT 3
 Query Match
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Matches 1
 Query Match
Best Local S
Matches 1
 Using the method somatocrinin can be obtd. on a large scale with good yield and good purity. The prod. is used in man for the treatment of dwarfism and retarded growth and for anabolic protein deficiencies. In animals it is useful for promoting wt. growth for increased prodn., lactation etc. This index is based on EP-122818,
 Synthesis of hpure mentide fragments
 Sequence
 The inventors claim hhpGRF fragments used for the
 Claim 4;
 WPI; 1984-256760/42
 Diaz
 29-NOV-1983;
21-FEB-1983;
 Sequence
 20-FEB-1984;
 30-AUG-1984.
 AU8424774-A
 Modified-site
 Homo
 anabolic
 Sequence of fragment D.corresp. to residues 25-27 of human pancreatic growth hormone releasing factor (somatocrinin)
 03-AUG-1992
 AAP40819;
 AAP40819 standard;
 (SNFI)
 Modified-site
 Hormone;
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 Similarity
 Demarne H,
 Page 67; 76pp;
 dwarfism;
 protein
 of hpGRf in
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 35.3%;
ilarity 100.0%
Conservative
 Conservative
 À,
 equivalent of AU8424774
 Ą
 SA.
 83FR-0002781
 83FR-0019058
 84AU-0400343
 /label= Boc-D(OBzl)
/note= "Boc=tertiobutyloxycarbonyl (carbamate);
OBzl=ester benzylique"
 Location/Qualifiers
 /label= m-nh-nh2
 a; therapy; r deficiency;
 peptide;
 entry)
 35.3%;
 Roncucci
 liquid
J.08; F.
 French.
 Score 6; DB 9; Pred. No. 7.4
 retarded growth;
 0;
 W
 phase
 growth promoter;
 Score 6;
Pred. No.
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 Mismatches
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 reactions - with use of new
 DB 5; Ler
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 .4e+05;
 21;
 25-27 of human
 Length
 lactation
 Length
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 Indels
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 growth for EP-122818,
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 hpGRF
 Gaps
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RESULT 5
 RESULT 4
AAR04607
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 Query Match
Best Local (
 Matches
 Antiviral agent contg. tri:peptide (unit) - of basic aminoacid, then alanine, glycine or sarcosine, and acidic aminoacid, effective against virus with protein-terminated
 EP347931-A.
 Cell adhesion;
 Core repeat of cell-adhesive protein.
 AAR00718 standard; peptide;
 Peptide is effective against inhibiting propogation of DNA or bonded, protein containing viruses eg. Poliovirus, Hepatitis v
 14-SEP-1988;
 19-MAR-1990
 JP02078631-A
 Synthetic
 Antiviral; M2;
 Antiviral agent.
 05-SEP-1990
 AAR04607 standard; peptide; 3 AA.
WPI; 1990-001305/01
 Saiki I, Nishi N,
 23-JUN-1989;
 27-DEC-1989
 29-MAY-1990
 AAR00718;
 Sequence
 Disclosure; ; 4pp; Japanese
 WPI; 1990-129060/17.
 14-SEP-1988;
 AAR04607;
 (AZUM/) AZUMA
 (NIHA) NIPPON MINING
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 Similarity
1; Conserv
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 Conservative
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 (first entry)
 (first entry)
 poliovirus; polio; heatitis
 88JP-0156133
 89EP-0111468
 anti-metastatic agent; immunomodulation; core repeat
 88JP-0228843
 88JP-0228843
 35.3%; but
100.0%; Pr
 Azuma
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 3 AA
 Score 6; 1
 Tokura
 Mismatches
 DB 11;
o. 7.4e+(
 .4e+05;
 Length 3;
 Indels
 0
 virus
 RNA
 Gaps
 DNA
 0
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RESULT 6
AAR25615
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Query Match
Best Local S
Matches 1
 Peptide core is repeated 2-20 times to form a cell-adhesive protein of mol. wt. 1,500-5,000. The protein is an (ant)agonist of cell-adhesive proteins such as fibronectin. It has high antimetastatic activity against cancer and can be used in immunomodulation, wound healing, platelet aggregation inhibition and alleviation of neuro-disorders. See also AAR00722.
 Polypeptide with repeated as anti-metastatic agent i cell-adhesion proteins
 The peptide corresponds to a C- and N-terminal truncated version of the Harvey ras oncogene from residues 17-44, i.e. from residues 30-32. The peptide is capable of binding to GTPase activating protein (GAP) thus inhibiting Ras activation by GAP and inhibiting Ras-dependent cell transformation. Derivative to the Ras control of the Ras capable of the Ras
 terminal truncations, or modifications of specific amino acids, e.g. the most potent Ras inhibitor is Ras 17-32. Oncogenic forms of Ras occur in various human cancers, e.g. colorectal carcinoma, exocrine pancreatic carcinoma and myeloid leukaemias. Ras complexed with GTP can bind GAP and this is thought to be the important step in the transformation activity of Ras. The peptide is also capable of
 Synthetic peptide inhibitors of Ras-GAP interaction antitumour agents against e.g. colorectal carcinoma pancreatic carcinoma and myeloid leukaemia
 GTPase; activating protein; GAP; oncogenesis; cancer; truncated; colorectal; exocrine pancreatic; myeloid leukaemia; adenyl acylase.
 Harvey Ras inhibitor - Ras
 AAR25615;
 AAR25615 standard; peptide;
 Sequence
 Claim 2; page 14; 16pp; English.
 Claim 3; Page 7; 31pp; English.
 WPI; 1992-251427/31.
 Freidinger RM, Garsky VM,
 24-DEC-1990;
 29-JUL-1992.
 EP496162-A.
 Synthetic.
 20-JAN-1993
 (MERI) MERCK & CO INC.
 16-DEC-1991;
 peptide are also provided,
 12 D 12
 3 D 3
 Similarity
 3 AA;
 Conservative
 (first entry)
 90US-0632891
 91EP-0311658.
 agent for
 35.3%;
 sequences of cell adhesion protein used for cancer and agonist or antagonist of
 comprising C-terminal truncations,
 30-32
 Gibbs JB,
 0
 Score 6;
Pred. No.
 Mismatches
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 Schaber
 .4e+05
 carcinoma, exocrine
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 Length
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RESULT 8
AAR30728
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AAR36707
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 Query Match
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Matches 1
 Query Match
Best Local Similarity
Matches 1; Conserv
 The sequence is that of an RGD-contg. peptide which is used in a method for prevention of adhesion formation for a time sufficient to permit tissue repair. The method is used for minimising or preventing adhesion formation, partic. in the peritoneum following
 surgery, but also for e.g. carque ophthalmic, CNS and other uses.
 AAR30728 standard;
 Prevention of adhesion formation, administering a RGD-contg. peptid
 07-NOV-1991;
 W09308818-A.
 Synthetic.
 Tissue repair; peritoneum; surgery; post-surgically; inhibition; platelet aggregation; cardiovascular; orthopedic; thoracic;
 AAR36707 standard; peptide; 3
 Sequence
 at the site of administration
 Example; Page 18;
 administering
tissue repair
 WPI; 1993-167381/20.
 Dizerega
 06-NOV-1992;
 ophthalmic;
 Adhesion formation
 26-AUG-1993
 AAR36707;
 Sequence
 adenyl acylase.
 (UYSC-) UNIV
 13-MAY-1993
 12 D 12
 12 D 12
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 <u>,,</u>
 Similarity
 D 1
 D
3
 ic, CNS and other uses. In addn., the peptide inhibits aggregation and does not induce inflammation or trauma
 but also for e.g. cardiovascular, orthopedic, thoracic, ic, CNS and other uses. In addn., the peptide inhibits
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 3 AA;
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 Conservative
 Conservative
 CNS; use.
 SOUTHERN CALIFORNIA.
 A,
 (first
 Rodgers
 91US-0789231
 92WO-US09494
 22pp;
 peptide;
 prevention
 entry)
 35.3%;
 See
 35.3%;
 ZE;
 English.
 also AAR25602-29
 peptide
 ω
 Score 6; DB 1; Pred. No. 7.4
0; Mismatches
 0
 0;
 Score 6; DB 1
Pred. No. 7.4
0; Mismatches
 RGD-contg. peptide
 A
 partic. post-surgically - comprises
s for a time sufficient to permit
 DB 14; L. 7.4e+05;
 13;
 .4e+05;
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 Length
 Length
 Indels
 Indels
 0;
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 Gaps
 Gaps
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RESULT 9
AAR30753
 XOXXXXXXXXXX
 Query Match
Best Local S
Matches 1
JP04360899-A
 Synthetic.
 The prepn. of DSDPR is claimed and involves e.g. fragment-condens C-protected tripeptide with N-protected dipeptide to form pentape and then removing the protective gps.
N-t-butoxycarbonyl-beta-benzyl-L-aspartyl-L-prolyl-L-arginine is new crd "
 L-Aspartyl-L-seryl-L-aspartyl-L-prolyl-L-arginine prepn. - involves fragment-condensing tri:peptide with amino-protected di:peptide to form penta:peptide
 Modified-site
 Physiologically active; basophil; tripeptide
 Sequence
 Claim 7;
 WPI; 1993-032710/04.
 04-JUN-1991;
 Key
 IgE-mast cell
 26-MAY-1993
 AAR30753;
 AAR30753 standard;
 04-JUN-1991;
 14-DEC-1992
 JP04360898-A
 Synthetic
 AAR30728;
 Modified-site
 new cpd
 (TANA) TANABE SEIYAKU CO.
 Modified-site
 Basophil;
 IgE-mast cell reaction preventing peptide intermediate
 20-MAY-1993
 12 D 12
 1 D 1
 1;
 Similarity
 Page 2;
 protective group; fragment condensing
 3 AA;
 Conservative
 (first entry)
 (first entry)
 reaction
 91JP-0159394
 91JP-0159394.
 gpp;
 Location/Qualifiers
 Location/Qualifiers
 /note=
 note-
 /note= "N-t-butoxycarbonyl-beta-benzyl-L-aspartyl"
 peptide;
 35.3%;
 Japanese.
 "N-t-butoxycarbonyl-beta-benzyl-L-Asp"
 "N(G)-nitro-L-Arg benzyl ester"
 inhibitory peptide prepn. peptide
 ω
 0
 Score 6; 1
Pred. No.
 A
 Mismatches
 . 7
 3 14;
7.4e+05;
0;
 Length
 fragment-condensing
e to form pentapepti
 Indels
 pentapeptide
 0
 Gaps
```

14-DEC-1992.

ţ

```
RESULT 10
AAR53144
ID AAR53
XX AAR53
XX AAR53
XX AAR53
XX Drug;
XX Byste
XX Byste
XX Synth
XX Synth
XX Synth
XX Synth
XX Synth
XX Hodif
FT Modif
FT
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 Matches
 Query Match
Best Local
 The sequences given in AAR44043-47 and AAR53144 represent example the claimed RGD containing peptide of the invention. These percorrespond to the generic formulae:

HO2-(CH2)m-C(O)-([X]-Axg-Gly-Asp-[Y])n-O-CH2CH(OR1)CH2OR2
R3-([X]-Axg-Gly-Asp-[Y])n-Z
 Prepn. of physiologically active penta:peptide - comprises fragment-condensing specified carboxyl protected tri:peptide and amino-protected di:peptide and removing protective gps.
 05-OCT-1993.
 Synthetic
 systemic lupus.
 Drug;
 02-JUN-1994
 The peptide is used active and prevents
 Claim; Page 2; 8pp; Japanese
 WPI; 1993-032711/04.
 04-JUN-1991;
 Disclosure;
 peptide
 WPI; 1993-348360/44
 (FUJE
 16-MAR-1992;
 16-MAR-1992;
 JP05255105-A
 Modified-site
 Key
Modified-site
 RGD peptide
 AAR53144;
 AAR53144 standard;
 (TANA
 04-JUN-1991;
 Immuno-control drug for organ transplant rejection etc. peptide having arginine, glycine, aspartic acid sequence
 organ transplantation; rejection; immune disorder;
) TANABE SEIYAKU
 12 D 12
 1 D 1
 FUJI PHOTO FILM CO
 1;
 Similarity
 w
 Page 3; 11pp;
 derivative
 Conservative
 AA;
 (first
 91JP-0159492
 92JP-0058460
 92JP-0058460
 91JP-0159492
 Location/Qualifiers
 /note-
 /note-
 peptide;
 in the prepn. (claimed) of a physiologically the IgE - mast cell (basophil) reaction.
 35.3%;
 င္ပ
 "Asp-OH or Asp-NH2"
 "C9H19C0-Arg, C13H27C0-Arg, C15H31C0-Arg, CH3-{(CH(CH3)-(CH2)3]3-CH(CH3)-CH2-CO-Arg or CH3-{(CH(CH3)-(CH2)3]2-CH(CH3)-CH2-CO-Arg"
 Japanese
 LTD
 w
 0;
 Score 6; Pred. No.
 ₿
 Mismatches
 1 AAR53144 represent examples of the invention. These peptides
 DB
. 7
 .4e+05;
s 0;
 Length 3;
 Indels
 contains
 0;
 ç
 Gaps
 a11
 0
RESULT 12
AAR48960
ID AAR48
XX
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RESULT 11
AAR44666
 SSSSSSSSXX
밁
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 Š
 Query Match
Best Local
 Query Match
Best Local
 Matches
 Matches
 [X], [Y] = amino acid
m = 1-5;
n = 1-5;
n = 1-5;
R1, R2 = H or 8-24C a
R3 = 6-24C acyl;
Z = hydroxyl or amino
These peptides form t
control of organ tran
 control of organ transplantation rejection or immune disorders as systemic lupus.
 A peptide complex contg. peptide 5 as guest mol. is useful platelet aggregation or adhesion inhibitor. It is hardly by protease in vivo and thus maintains its effect for a lor
 Complex of adhesion peptide in host molecule e.g. beta-cyclodextrin - useful as platelet aggregation which is resistant to protease degradation in-vivo
 Sequence
 Disclosure; Page 4; 5pp; Japanese.
 WPI; 1994-173759/21.
 Platelet aggregation;
beta-cyclodextrin; pro
 Platelet aggregation
 AAR44666;
 AAR44666 standard; peptide;
 Sequence
 (FUJF) FUJI PHOTO FILM
 09-OCT-1992;
 09-OCT-1992;
 JP06116289-A.
 Synthetic
 20-JAN-1995
 12 D 12
 12 D 12
 3
D
ω
 1;
 Similarity
 Similarity
U
 ω
 3 AA;
 ω
 amino acid
 Conservative
 Conservative
 Ŗ
 (first entry)
 amino.
 92JP-0271294
 92JP-0271294.
 protease;
 acyk
 35.3%;
100.0%;
 35.3%;
 or adhesion inhibitor -
 adhesion; inhibitonotease; resistance;
 or peptide residues;
 8
 or alkyl;
 GET
 Score 6; pred. No
 0
 0;
 Score
Pred.
 ξ
 red. No. 7.4
 Mismatches
 inhibitor;
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 DB 15; L
5. 7.4e+05;
 7.4e+05;
es 0;
 peptide 5.
 Length 3;
 Length
 Indels
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 inhibitor
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 n as a hydrolysed ong period.
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 Gaps
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AAR48960 standard;

Protein;

```
RESULT 13
AAR82907
ID AAR82
XX
AC AAR82
XX
DT 20-DE
XX
DE NON-F
XX
Cance
KW Cance
KW Water
OS Syntl
XX
JP07(
 Š
 밁
 Query Match
Best Local
 Matches
 This sequence is encoded by a PCR fragment of NI4-3 and represents the C-terminal peptide fragment of the truncated GAG protein. The DNA encoding this fragment was ligated into ClaI/SalI digested pX and the corresponding plasmid was used to produce the antisense virus of the invention. Antisense or truncated RNAs expressed by these viruses bind to the mRNAs expressed by the naturally occuring viruses (NOVs) and prevent the mRNAs from being translated into proteins, thereby
 JP07089999-A
 Synthetic
 Cancer metastasis; adhesive peptide; core sequence; dextran; water soluble polysaccharide; metastasis; wound; immunogenici
 Non-RGD,
 20-DEC-1995
 AAR82907;
 AAR82907 standard; peptide; 3 AA.
 Sequence
 Disclosure; Page 108; 167pp;
 SIV infection
 WPI; 1994-065685/08
N-PSDB; AAQ57688.
 Hu W,
 HIV-1; HXB2; antisense; sequence inversion; naturally occuring virus; NOV; translation; hepatitis B; HIV-2; SIV; flip-over PCR.
 HIV-2 or
 the infectivity of the NOVs, allowing antisense RNAs to reach
 New antisense viruses and anti:sense-ribozyme viruses -treating or preventing viral infections, partic. HIV-1,
 30-JUL-1992;
 30-JUL-1993;
 17-FEB-1994
 WO9403596-A
 Synthetic
 NL4-3 truncated GAG C-terminal
 12-SEP-1994
 (UYHA-) UNIV HAWAII.
 AAR48960;
 reventing the NOV from replicating.
 for
 12
 Wang
 N
 Similarity
 o
 U
 the natural viruses. Antisense viruses such as these may be treating or preventing a viral infection, particularly HIV-1 SIV infection or hepatitis B infection.
 non-YISGR
 N
 12
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 Conservative
 Ŗ,
 (first entry)
 (first entry)
 92US-0921104
 93WO-US07179
 cancer
 35.3%; Fr
100.0%; Pr
 metastasis inhibitory peptide
 Score 6; DB 1; Pred. No. 7.4
0; Mismatches
 English.
 peptide
 The antisense viruses maintain
 DB 15; L
 antisense virus; infectio
replication; infectivity;
 0
 Length 3;
 immunogenicity.
 Indels
 used for HIV-2 or
 0
 cancer;
 infection;
 Gaps
 0
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RESULT 14
AAR70472
밁
 δÃ
 PR XX
 Matches
 Query Match
Best Local :
 Cancer metastasis inhibitive peptide derivs. - useful of cancer metastasis, healing of wounds and regulation
 with a core sequence selected from: RGD (AAR70472-85), YIGSR (AAR70486-90) or other sequence (AAR82907-24), linked to a water soluble polysaccharide, preferably a water soluble dextran, at the C-terminus. The peptides are useful in inhibiting cancer metastasis, healing wounds and the regulation of immunogenicity.
 WPI;
 Disclosure;
 Synthetic
 Cancer metastasis; adhesive peptide; core sequence; dextran; cancer;
 Cancer
 Cancer metastasis inhibitive peptide derivs. of cancer metastasis, healing of wounds and reconstructions.
 WPI; 1995-167254/22.
 (JAPG) NIPPON
 17-SEP-1993;
 17-SEP-1993;
 04-APR-1995
 JP07089999-A.
 water
 20-DEC-1995
 AAR70472 standard; peptide; 3 AA
 Sequence
 The peptides AAR70472-90 and AAR82907-24 are peptide derivatives which inhibit cancer metastasis. They are composed of an adhesive peptide
 Disclosure; Page 3;
 17-SEP-1993;
 17-SEP-1993;
 04-APR-1995
 Lmmunogenicity.
 AAR70472;
 immunogenicity.
 (JAPG) NIPPON ZEON
 Local Similarity
 1995-167254/22.
 soluble polysaccharide;
 12 D 12
 metastasis
 N
 ۲.
 U
 N
 3 AA;
 Page
 Conservative
 (first entry)
 ZEON
 93JP-0254779
 93JP-0254779
 93JP-0254779.
 93JP-0254779.
 <u>ب</u>
 inhibitory
 6pp;
 XX.
 6pp; Japanese
 35.3%;
100.0%;
 Japanese
 0,
 peptide
 Score 6;
Pred. No.
 metastasis; wound; immunogenicity.
 Mismatches
 core
 DB 16;
 .4e+05;
 RGD sequence
 9. - useful f
1 regulation

 useful for inhibition regulation of

 Length
 Indels
 for inhibition of
 water soluble
 0;
 Gaps
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The peptides AAR70472-90 and AAR82907-24 are peptide derivatives whi inhibit cancer metastasis. They are composed of an adhesive peptide with a core sequence selected from: RGD (AAR70472-85), YIGSR

(AAR82907-24),

linked to a water soluble

which

(AAR70486-90) or other sequence

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RESULT 15
AAR64556
ID AAR64456
AC AAR64
XX AAR64
XX AAR64
XX AAR64
XX AAR64
XX AAR64
XX AAR66
CC From
CC AAR66
CC From
CC Isoli
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 Matches
 Query Match
Best Local Similarity
 AAR64556-589 are peptide derivatives of a 37 mer RF-1 peptide derived from respiratory syncitial virus (RSV) (AAR64590) which have been truncated at the Carboxy terminus. The peptides are DP-178 like peptides. DP-178 corresponds to amino acids 638 to 673 of the HTV-1 isolate LAI transmembrane protein 9941. It forms a putative alpha helix at the C-terminal end of the 9941 ectodomain, and complexes with DP-107 (corresponds to amino acids 558-595) which contains a leucine zipper motif. The peptides complex via non-covalent protein protein interactions. The peptide derivatives were identified by a computer assisted peptide sequence search. The antiviral activity of this peptide is not stated in the
 Computer search generated synthetic peptides - are inhibitors {\tt HIV} transmission
 Key
Modified-site
 antiviral activity; DP-178; DP-107; diagnostic; HIV-1LAI; human immunodeficiency virus; transmembrane protein; gp41; alpha helix; leucine zipper; DP-185; respiratory syncitial virus;
 polysaccharide, preferably a water soluble dextran, at the C-terminus. The peptides are useful in inhibiting cancer metastasis, healing wounds and the regulation of immunogenicity.
 Claim 14; Page 137; 182pp; English.
 WPI; 1995-036105/05
 Barney SO, Bolognesi DP, Petteway SR, Wild CT;
 07-JUN-1993;
 07-JUN-1994;
 22-DEC-1994.
 WO9428920-A
 Synthetic
 RF-1 peptide 1
 01-SEP-1995
 AAR64556 standard; Peptide; 3 AA
 Sequence
 specification
 (UYDU-) UNIV DUKE.
 Modified-site
 AAR64556;
 12 D 12
 3 D 3
 1; Conservative
 3 AA;
 (first entry)
 9305-0073028
 94WO-US05739.
 from
 Location/Qualifiers
 /note= "optionally has a carboxyl, amido, hydrophobic
or macromolecular carrier gp. attached"
 /note-
 respiratory syncitial virus
 35.3%;
 "optionally has an amino, acetyl,
9-fluorenylmethoxy-carbonyl, hydrophobic or
macromolecular carrier gp. attached*
 Lambert DM,
 0;
 Score 6;
Pred. No.
 Mismatches
 . DB
 Matthews TJ;
 16; I
.4e+05;
 0
 Length 3
 Indels
 0
 Gaps
 0
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Search completed: June 5, 2003, 16:00:25 Job time: 40.7273 secs
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 Sox
 Matches
 Query Match
Best Local
 Sequence
 12 D 12
 3 D 3
 Similarity
1; Conserv
 3 AA;
 Conservative
 35.3%;
 0,
 Score 6;
Pred. No.
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 . 7
 .4e+05
 16;
 0;
 Length
 Indels
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 0
 Gaps
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protein

protein search, using sw·model

Copyright

GenCore (c) 1993

version 5.1.6 - 2003 Compugen

Ltd

June

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18, Appl
18, Appl
19, Appl
10, Appl
 RESULT 1
US-07-820-154A-15
 RESULT 2
US-07-820-154A-23
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 Ş
 ; TOPOLOGY: linear; MOLECULE TYPE: protein US-07-820-154A-15
 Query Match
Best Local S
Matches 1
 TELECOMMUNICATION INFORMATION:
TELEPHONE: (212)977-9550
TELEPAX: (212)664-0525
TELEX: 422523
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 2 amino acids
 Patent No.
GENERAL II
 Sequence
 COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIA Release #1.0, V.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/820,154A
FILING DATE: 19920113
CLASSIFICATION: 424
 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
 CORRESPONDENCE ADDRESS:
ADDRESSEE: John P. White
STREET: 30 Rockefeller Plaza
 ATTORNEY/AGENT INFORMATION:
NAME: White, John P
 APPLICANT: Cochran Ph.D., Mark D
APPLICANT: Junker M.S., David E
TITLE OF INVENTION: Recombinant
NUMBER OF SEQUENCES: 40
 ZIP: 10112
 STATE:
 COUNTRY:
 15, AV.
NO. 5382425
 INFORMATION:
 12
 1
D
 New York
 ۲.
 Similarity
 aaaaaaaaaaaaaaaaa
 U
 AMINO ACID
 Application US/07820154A
 12
 USA
 Conservative
 35.3%;
 US/07/820,154A
 US-08-375-992A-15
US-08-375-992A-33
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PCT-US93-00324-39
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US-08-251-027-1
US-08-251-027-3
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 Score 6;
Pred. No.
 U
 ALIGNMENTS
 Mismatches
 Swinepox Virus
 Version #1.25
 DB 1; Lo
1.9e+05
 Length
 Indels
 sequence
Sequence
Sequence
Sequence
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a 3, Appl

a 3, Appl

a 9, Appl

a 5, Appl

a 6, Appl

a 7, Appl

a 117, Appl

a 117, Appl

a 12,
 Gaps
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Result

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Score

Query Match

Length

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analysis of the total score

SUMMARIES

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US-07-820-154A-15
US-07-820-154A-23
US-07-820-154A-39
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Maximum Minimum

BB

length:

0 2000000000

Post-processing:

Minimum Match 0% Maximum Match 100% Listing first 45 s

summaries

Total number of hits satisfying chosen parameters:

262574 segs, 29422922 residues

Scoring table: Sequence: Title: Perfect score:

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US-09-150-947F-18 17

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Searched

Application US/07820154A

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 US-07-820-154A-33
 Sequence 33, Application US/07820154A Patent No. 5382425
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 Matches
 TELEFAX: (212)664-0529
TELEX: 422523
INFORMATION FOR SEQ ID NO:
 atent No. 5382425
GENERAL INFORMATION:
 MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/07/820,154A

FILING DATE: 1920113
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
 ATTORNEY/AGENT INFORMATION:
NAME: White, John P
TELECOMMUNICATION: INFORMATION:
TELLEPHONE: (212)977-9550
TELEPAX: (212)664-0525
 SEQUENCE CHARACTERISTICS:
 CURRENT APPLICATION DATA:
 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
 APPLICANT: Cochran Ph.D., Mark D
MEPLICANT: JUNEATION: David E
TITLE OF INVENTION: Recombinant Swinepox Virus
NUMBER OF SEQUENCES: 40
 APPLICANT: Cochran Ph.D., Mark D
APPLICANT: Junker M.S., David E
 CORRESPONDENCE ADDRESS:
 TITLE OF INVENTION: Recombinant Swinepox Virus NUMBER OF SEQUENCES: 40
 CORRESPONDENCE ADDRESS
 CITY:
 FILING DATE: 1:
CLASSIFICATION:
 STREET:
 Local Similarity es 1; Conserv
 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
 COUNTRY:
 ADDRESSEE
 TOPOLOGY:
 APPLICATION NUMBER: US
FILING DATE: 19920113
 SOFTWARE:
 STREET:
 ADDRESSEE:
 LENGTH:
 INFORMATION:
 12 D 12
 New York
 H: 2 amino acids
AMINO ACID
 10112
 New York
 New York
 New York
 30 Rockefeller Plaza
 30 Rockefeller Plaza
 USA
 Conservative
 USA
 PatentIn Release #1.0,
 John P. White
 100.0%;
 US/07/820,154A
 Score 6;
 Version #1.25
 DB 1;
 .9e+05;
 Length 2;
 Indels
 0;
 Gaps
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 US-07-820-154A-33
 US-07-820-154A-39
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 Patent No.
 Matches
 Query Match
Best Local Similarity
 INFORMATION FOR SEQ ID NO:
 GENERAL INFORMATION:
 TOPOLOGY: 11
MOLECULE TYPE:
)7-820-154A-39
 NFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 2 amino acids
 ATTORNEY/AGENT INFORMATION:
NAME: White, John P
TELECOMMUNICATION:
TELEPHONE: (212)977-9550
 CURRENT APPLICATION DATA:
 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
 SEQUENCE CHARACTERISTICS:
 NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
 TOPOLOGY: 11
 TELECOMMUNICATION INFORMATION:
 APPLICANT: Cochran P
APPLICANT: Junker M.
 TITLE OF INVENTION:
 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0
 APPLICATION NUMBER: US
FILING DATE: 19920113
 TELEFAX:
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 ELEPHONE:
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 12 D 12
1 D 1
 1 D 1
 Similarity
 10112
 T: 30 Rockefeller Plaza
New York
 5382425
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 AMINO ACID
 AMINO ACID
 New York
 Application US/07820154A
 Conservative
 USA
 (212)664-0525
 Conservative
 PatentIn Release #1.0, Version #1.25
 Cochran Ph.D.,
 (212)664-0525
 John P. White
 protein
 protein
 Recombinant Swinepox Virus
 35.3%;
 .S., David
 100.0%;
 US/07/820,154A
 Mark D
 Score 6;
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 Score 6; Pred. No.
 Mismatches
 DB 1; Length 2;
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ches 0; Indel
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3s 0;
 Length 2;
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RESULT 5 US-08-358-160-171

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RESULT 6
US-08-153-799-20
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; Patent No. 5766883
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 US-08-358-160-171
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 INFORMATION FOR SEQ ID NO:
 OLECULE (1900)
 ENERAL INFORMATION:
 SEQUENCE CHARACTERISTICS:
 CORRESPONDENCE ADDRESS:
ADDRESSEE: BROWDY AND NEIMARK
 MOLECULE TYPE:
 COMPUTER READABLE FORM:
 REFERENCE/DOCKET NUMBER: LE TELECOMMUNICATION INFORMATION: TELEPHONE: 202-628-5197
 CLASSIFICATION: 514
PRIOR APPLICATION DATA:
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 APPLICANT:
 ATTORNEY/AGENT INFORMATION:
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 FILING DATE: 26-JAN-1993
PRIOR APPLICATION DATA:
 PRIOR APPLICATION DATA:
 NUMBER OF SEQUENCES:
 TITLE OF INVENTION: ENGINEERED HUMAN-DERIVED KUNITZ
TITLE OF INVENTION: DOMAINS THAT INHIBIT HUMAN NEUTROPHIL ELASTASE
 PPLICANT:
 APPLICATION NUMBER: US 07/487,063 FILING DATE: 02-MAR-1990
 APPLICATION NUMBER: US 0: FILING DATE: 13-OCT-1993
 TELEFAX:
 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
 COUNTRY:
 REGISTRATION NUMBER:
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 APPLICATION NUMBER:
 FILING DATE:
 APPLICATION NUMBER:
 MEDIUM TYPE:
 ocal
 12 D 12
 1 D 1
 Similarity
 Washington
 20004
 District of Columbia
 419 Seventh Street, N.W.
Ballance, David J
 202-737-3528
 USA
 Conservative
 PatentIn
 MARKLAND, Willi
KENT, Rachel B.
 ROBERTS, Bruce L. MARKLAND, William
 GUTERMAN,
 Floppy disk
 UMBER: US 07/664,989
01-MAR-1991
 02-SEP-1988
 16-DEC-1994
 Arthur C.
 35.3%; Fr
100.0%; Pr
0;
 Robert C.
 Sonia K.
 Release #1.0, Version #1.25
 US 07/240,160
 US 08/133,031
 US 08/009,319
 US/08/358,160
 28,005
 Score 6;
Pred. No.
 Mismatches
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 DB 1; Le
o. 1.9e+05;
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 RESULT 7
US-08-097-554A-15
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GENERAL INFORMATION:
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 Matches
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 INFORMATION FOR SEQ ID NO:
 COMPUTER: IBM PC COMPATIBLE
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SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
 FILING DATE: 29-OCT-1991 ATTORNEY/AGENT INFORMATION:
 APPLICATION NUMBER: GB 8 FILING DATE: 29-APR-1989 PRIOR APPLICATION DATA:
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 TELECOMMUNICATION INFORMATION:
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 COMPUTER READABLE FORM:
 APPLICANT: Goodey, Andrew R
TITLE OF INVENTION: Polypep1
NUMBER OF SEQUENCES: 23
 CORRESPONDENCE ADDRESS
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 CORRESPONDENCE ADDRESS:
 WPPLICANT: Cochran Ph.D., Mark D
WPPLICANT: Junker M.S., David E
UITLE OF INVENTION: Recombinant Swinepox Virus
NUMBER OF SEQUENCES: 112
 TELEFAX: 12484
 REGISTRATION NUMBER: 248
REFERENCE/DOCKET NUMBER:
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 STREET:
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 TOPOLOGY:
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 APPLICATION NUMBER: PCT/GB90/00650 FILING DATE: 26-APR-1990
 CLASSIFICATION: 435
 COUNTRY: UZIP: 07974
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 STATE:
 CITY: New York
 ADDRESSEE:
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 EDIUM TYPE:
 15, Application US/08097554A
5, 5869312
 12 D 12
 1 D 1
 T: 100 Mountain Avenue Murray Hill
 Similarity
1; Conserv
 amino acid
 Swope, R Hain
 New York
 New Jersey
 30 Rockefeller
 2 amino acids
 (908) 665 24
(908) 771 6159
 Conservative
 linear
 R Hain Swope, BOC Health Care Inc
 John P.
 Floppy disk
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 Polypeptides
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 White
 US 07/775952
 GB 8909916.2
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 Score 6; DB 1
); Pred. No. 1.9
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 92H832
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COMPUTER READABLE FORM:

10112

USA

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; TOPOLOGY: linear; MOLECULE TYPE: protein US-08-097-554A-23
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 US-08-097-554A-23; Application US/08097554A
 US-08-097-554A-15
 Ouery Match 35.3%; Score 6; DB Best Local Similarity 100.0%; Pred. No. 1. Matches 1; Conservative 0; Mismatches
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 Patent No.
 GENERAL INFORMATION:
 INFORMATION FOR SEQ ID NO:
 INFORMATION FOR SEQ ID NO:
 NAME: White, John P
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212)977-9550
 SEQUENCE CHARACTERISTICS:
 ATTORNEY/AGENT INFORMATION:
 SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
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MEDIUM TYPE: Floppy disk
 SEQUENCE CHARACTERISTICS:
LENGTH: 2 amino acids
 TOPOLOGY: linear MOLECULE TYPE: protein
 TELEPHONE: (212)977-9550
 APPLICANT: Cochran Ph.D
APPLICANT: Junker M.S.,
 ATTORNEY/AGENT INFORMATION:
NAME: White, John P
 CURRENT APPLICATION DATA:
 NUMBER OF SEQUENCES: 1
 TITLE OF INVENTION: Recombinant Swinepox Virus
 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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FILING DATE: July 22, 1993
 COUNTRY:
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FILING DATE: July 22, 1993
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 TELEFAX:
 CLASSIFICATION:
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 ADDRESSEE:
 12 D 12
 101
 New York
 amino acid
 amino acid
 30 Rockefeller Plaza
 USA
 2 amino acids
 Conservative
 (212)664-0525
 Cochran Ph.D., Mark D
Junker M.S., David E
 (212)664-0525
 Patentin Release #1.0, Version #1.25
 John P. White
 Floppy disk
 35.3%;
 US/08/097,554A
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 Score 6;
Pred. No.
 Mismatches
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o. 1.9e+05;
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 RESULT 10
US-08-097-554A-39
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 US-08-097-554A-33
 US-08-097-554A-33
 Sequence 39, Application US/08097554A Patent No. 5869312
 Patent No.
 Query Match
 Patent No. 5
 Matches
 GENERAL INFORMATION:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
 APPLICANT: Cochran Ph.D., Mark D
APPLICANT: Junker M.S., David E
TITLE OF INVENTION: Recombinant Swinepox Virus
NUMBER OF SEQUENCES: 112
CORRESPONDENCE ADDRESS:
 MOLECULE TYPE:
 STREET: 30 ROCKE
CITY: New York
STATE: New York
 ZIP:
 COUNTRY: USA
 ADDRESSEE:
 CLASSIFICATION:
 COUNTRY:
 ADDRESSEE:
 1 D 1
 12 D 12
 12 D 12
 10112
 10112
 New York
 .
D 1
 E: John P. White
30 Rockefeller Plaza
 USA
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TELEX: 422523
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 2 amino ~-'
Type-
 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
 APPLICANT: Cochran Ph.D., Mark L
APPLICANT: Junker M.S., David E
TITLE OF INVENTION: Recombinant
NUMBER OF SEQUENCES: 112
CORRESPONDENCE ADDRESS:
 ATTORNEY/AGENT INFORMATION:
NAME: White, John P
TELECOMMUNICATION:
TELEPHONE: (212)977-9550
 MEDIUM TYPE: Floppy
 APPLICATION NUMBER: US/08/
FILING DATE: July 22, 1993
 Local Similarity
 TYPE: amino acid TOPOLOGY: linear
 New York
 Application US/08097554A
 30 Rockefeller Plaza
 Conservative
 Cochran Ph.D., Mark D
 protein
 Floppy disk
 Recombinant Swinepox Virus
 35.3%;
 US/08/097,554A
 Score 6; Pred. No
 0
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 DB 2; Le
5. 1.9e+05;
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 Indels
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US-08-539-432-15
 US-08-539-432-15
 US-08-097-554A-39
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 -08-533
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FILING DATE: 05-OCT-1995
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: DOROTHY R. AUTH
 TELEFAX: (212) 751-6849 ID NO: :
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REFERENCE/DOCKET NUMBER: 20
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MEDIUM TYPE: FLOPPY DISK
 ATTORNEY/AGENT INFORMATION:
NAME: White, John P
 SOFTWARE: PatentIn Rel CURRENT APPLICATION DATA:
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 NUMBER OF SEQUENCES:
 APPLICANT:
 TITLE OF INVENTION:
 TOPOLOGY:
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 OPERATING SYSTEM:
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 APPLICATION NUMBER: FILING DATE: July
 TYPE: Amino Acid
STRANDEDNESS: Unl
 COUNTRY:
 CLASSIFICATION:
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 LENGTH:
 OPERATING SYSTEM:
 LENGTH:
 12 D 12
 10054
 NEW YORK
 1; Conservative
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 Application US/08539432
 2 amino acids
 345 PARK AVENUE
 USA
 (212)664-0525
 MEDABALIMI, JOHN L.
 ASCII
 IBM PC COMPATIBLE SYSTEM: PC-DOS/MS-DOS
 Linear
 (212) 758-4800
 July 22, 1993
 protein
 Unknown
 TRANSFRAME INHIBITORY ELEMENT OF VIRAL
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n Release #1.0, Version #1.25
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 35.3%; Score 6; DB 2; Len 100.0%; Pred. No. 1.9e+05; Live 0; Mismatches 0;
 US/08/539,432
 US/08/097,554A
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Pred. No.
 2026-4194
 Mismatches
 DB 2; Le
). 1.9e+05;
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 Query Match
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 12 D 12
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RESULT 13
US-08-539-432-17
 US-08-539-432-16
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Patent No. 5872210
 TELEFAX: (212) 751-6849
INFORMATION FOR SEQ ID NO:
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 OPERATING SYSTEM: PC-D
SOFTWARE: ASCII
CURRENT APPLICATION DATA:
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 DDRESSEE:
 16,
 INFORMATION:
 1 D 1
 1; Conserv
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 10054
 NEW YORK
10054
 NEW YORK
 DOROTHY R. AUTH
 NEW YORK
 Application US/08539432
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 Application US/08539432
 345
 345 PARK AVENUE
 USA
 USA
 Conservative
 MEDABALIMI, JOHN L.
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 Linear
 IBM PC COMPATIBLE
 MORGAN & FINNEGAN, L.L.P
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 PARK AVENUE
 Unknown
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 TRANSFRAME INHIBITORY ELEMENT OF VIRAL
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CURRENT APPLICATION DATA:

OPERATING SYSTEM:

IBM PC COMPATIBLE

PC-DOS/MS-DOS

OMPUTER READABLE FORM:
MEDIUM TYPE: FLOPPY DISK

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US-08-480-640A-15
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 ; TOPOLOGY: Linear US-08-539-432-17
 US-09-327-424-2
 Sequence 15, Application US/08480640A Patent No. 6033904
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 sequence 2, Application US/09327424
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 GENERAL INFORMATION:
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APPLICANT: Cochra
APPLICANT: Junker
 APPLICANT: Eyre, David R
TITLE OF INVENTION: KIT FOR DETECTING ANALYTE INDICATIVE OF TYPE I COLLAGEN
TITLE OF INVENTION: RESORPTION IN VIVO (as amended)
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CURRENT FILING DATE: 1999-06-07
NUMBER OF SEQ ID NOS: 4
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 TELEFAX: (212) 751-6849 INFORMATION FOR SEQ ID NO:
 OTHER INFORMATION: N-telopeptide sequence of type II collagen
 FEATURE:
 ORGANISM: Human
 APPLICANT: Cochran, Mark D.
APPLICANT: Junker, David E.
TITLE OF INVENTION: Recombinant Swinepox Virus
NUMBER OF SEQUENCES: 225
CORRESPONDENCE
 SEQUENCE CHARACTERISTICS:
 ATTORNEY/AGENT INFORMATION: NAME: DOROTHY R. AUTH
 REGISTRATION NUMBER: 36,434
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FILING DATE: 05-OCT-1995
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 35.3%; Sullarity 100.0%; I Conservative 0;
 (212) 758-4800
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No. 1.9e+05;
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US-08-480-640A-15
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 ATTORNEY/AGENT INFORMATION:
NAME: White, John P
 CURRENT APPLICATION DATA:
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 ADDRESSEE: John P. White
STREET: 1185 Avenue of the Americas
CITY: New York
STATE: New York
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 TELEPHONE:
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 LENGTH:
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 PatentIn Release #1.0, Version #1.25
 (212)
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Title: Perfect score:

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OM protein -

protein search, using sw model

GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd

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 RESULT 1
US-10-187-339-6
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US-10-206-699-296
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 ; ORGANISM: Agrobacterium tumefaciens US-10-187-339-6
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CURRENT FILING DATE: 2002-06-28
PRIOR APPLICATION NUMBER: US/09/434,837
PRIOR FILING DATE: 1999-11-04
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PRIOR FILING DATE: 1998-11-05
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Publication No. US20030084478A1
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APPLICANT: Ream, Walt et al.,
TITLE OF INVENTION: Plants Having Enhanced Gall Resistance and
TITLE OF INVENTION: Methods and Compositions for Producing the
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Publication No. US20030100510A1
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APPLICANT: Sundaramoorthy, M.
APPLICANT: Hudson, B.
TITLE OF INVENTION: Crystallized structure of Type IV Collagen NC1 Domain Hexamer
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 444449887833228554433766378
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100.0%; Pred. No.
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Result

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derived by analysis of the total

score distribution.

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SUMMARIES

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Description

US-10-187-339-6 US-10-206-699-296

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0 US-09-982-172-8 0 US-09-982-172-105 US-09-900-936-11 US-09-840-277-31 US-09-747-408-21 US-10-014-162-37 US-10-014-162-37 US-11-039-876A-4 US-10-015-979-58 US-10-226-956-316 US-10-226-956-318 US-10-226-956-318 US-10-226-956-318 US-10-226-956-318 US-10-226-956-318 US-10-226-956-318 US-10-226-956-318 US-10-226-956-318 US-10-226-956-319 US-10-226-956-319

Sequence Sequence Sequence Sequence Sequence Sequence Sequence

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Sequence Sequence Sequence Sequence

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RESULT 4
US-09-982-172-105
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 QΥ
 ; OTHER INFORMATION: Computer generated synthetic peptide
US-09-982-172-8
 US-09-982-172-8
 ; ORGANISM: Homo sapiens
US-10-206-699-296
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Best Local S
Matches 1
 Sequence 105, Application US/09982172 Patent No. US20020137119A1 GENERAL INFORMATION:
APPLICANT: Emil Israel Katz
 SEQ ID NO 8
 Sequence 8, Application US/09982172 Patent No. US20020137119A1
 Query Match
Best Local
 GENERAL INFORMATION:
 SOFTWARE: Par
SEQ ID NO 296
TITLE OF INVENTION: PEPTIDES REPRESENTATIVE OF POLYPEPTIDES OF INTEREST AND ANTIBODIE TITLE OF INVENTION: DIRECTED THEREAGAINST, AND METHODS, SYSTEMS AND KITS FOR GENERAL TITLE OF INVENTION: UTILIZING EACH FILE REFERENCE: 01/2283 CURRENT APPLICATION NUMBER: US/09/982,172 CURRENT FILING DATE: 2001-10-19 NUMBER OF SEQ ID NOS: 253 SOFTWARE; Patentin version 3.1 SEQ ID NO 105
 FILE REFERENCE: 01/22283
CURRENT APPLICATION NUMBER: US/09/982,172
CURRENT FILING DATE: 2001-10-19
NUMBER OF SEQ ID NOS: 253
SOFTWARE: Patentin version 3.1
 TITLE OF INVENTION: PEPTIDES REPRESENTATIVE OF POLYPEPTIDES OF INTEREST AND TITLE OF INVENTION: DIRECTED THEREAGAINST, AND METHODS, SYSTEMS AND KITS FOR TITLE OF INVENTION: UTILIZING EACH
 PRIOR APPLICATION NUMBER: US 60/351,289
PRIOR FILING DATE: 2001-10-29
PRIOR APPLICATION NUMBER: US 60/366,854
PRIOR FILING DATE: 2002-03-22
PRIOR PPLICATION NUMBER: US 60/385,362
PRIOR FILING DATE: 2002-66-03
NUMBER OF SEQ ID NOS: 307
 LENGTH: 2
TYPE: PRT
 ORGANISM: Artificial sequence
 FEATURE:
 ENGTH: 2
 Local Similarity
nes 1; Conserv
 NT FILING DATE: 2002-07-26
APPLICATION NUMBER: US 60/308,523
 12
 12 D 12
 2 D 2
 Similarity
1; Conserv
 PatentIn version 3.1
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 Emil Israel Katz
 Conservative
 2001-07-27
 35.3%; Score 6; DB 10; 100.0%; Pred. No. 3.3e+05 tive 0; Mismatches 0
 35.3%;
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; FEATURE: ; OTHER INFORMATION: Description of Artificial Sequence:AII US-09-900-936-11
; OTHER INFORMATION: Integrin antagonist peptide US-09-840-277-31
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 ; OTHER INFORMATION: Computer generated synthetic peptide US-09-982-172-105
 US-09-900-936-11
 SOFTWARE: PatentIn version 3.1 SEQ ID NO 31
 Query Match
Best Local Similarity
Matches 1; Conser
 Patent No. US20020168363A1
 Matches
 Query Match
Best Local Similarity
 SEQ ID NO 1
 GENERAL INFORMATION:
 Patent No. US200
 GENERAL INFORMATION:
 Sequence 31,
 CURRENT FILING DATE: 2001-08-14
PRIOR APPLICATION NUMBER: 60/198,919
PRIOR FILING DATE: 2000-04-21
PRIOR APPLICATION NUMBER: 60/201,394
PRIOR FILING DATE: 2000-05-03
NUMBER OF SEQ ID NOS: 135
 CURRENT APPLICATION NUMBER: US/09/840,277 CURRENT FILING DATE: 2001-08-14
 CURRENT APPLICATION NUMBER: US/09/900,936
CURRENT FILING DATE: 2001-07-09
NUMBER OF SEQ ID NOS: 50
SOFTWARE: Patentin Ver. 2.0
 TITLE OF INVENTION: Methods for Promoting Dendritic Cell Proliferation TITLE OF INVENTION: or Differentiation FILE REFERENCE: 00-506-A
 FILE REFERENCE:
 APPLICANT: Rodgers, Kathleen APPLICANT: dizerega, Gere
 TITLE OF INVENTION:
 APPLICANT: FEIGE, ULRICH
 ORGANISM: Artificial Sequence
 TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
 FEATURE:
 ORGANISM: Artificial Sequence
 12 D 12
 12 D 12
 1;
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 D 1
 LACEY, DAVID LEE
BOONE, THOMAS CHARLES
 dizerega,
 Application US/09900936
 Application US/09840277
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 A-688A
 20165141A1
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 35.3%; Score 6; DB 9; Le
100.0%; Pred. No. 3.3e+05;
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 Length 3;
 Length 2;
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RESULT 8
US-10-014-162-37
; Sequence 37, Application US/10014162
; Publication No. US20030032096A1
; Publication No. US20030032096A1
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 US-09-747-408-21
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 ; ORGANISM: Bos taurus
US-10-014-162-37
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 US-09-747-408-21
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 GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Usdin, Ted B.
APPLICANT: Hoare, Samuel R.J.
APPLICANT: Hoare, Samuel R.J.
TITLE OF INVENTION: PARATHYROID HORMONE RECEPTOR LIGANDS
FILE REFERENCE: NIH175.001C1
CURRENT APPLICATION NUMBER: US/10/014,162
CUBRENT FILING DATE: 2001-12-11
PRIOR APPLICATION NUMBER: PCT/US00/1677
PRIOR APPLICATION NUMBER: PCT/US00/1677
PRIOR FILING DATE: 2000-06-15
 Sequence 21, Application US/09747408 Publication No. US20030003141A1 GENERAL INFORMATION:
 SOFTWARE: F
 Matches
 SEQ ID NO 21
 Query Match
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 Query Match
 APPLICANT: Green, Allan M.
APPLICANT: Gervais, Francine
TITLE OF INVENTION: Compounds And Methods For Modulating
TITLE OF INVENTION: Cerebral Amyloid Angiopathy
EXIE REFERENCE: NBI-088
CURRENT APPLICATION NUMBER: US/09/747,408
CURRENT FILING DATE: 2000-12-22
 PRIOR APPLICATION NUMBER: 60/139335
PRIOR FILING DATE: 1999-06-15
NUMBER OF SEQ ID NOS: 112
 SOFTWARE: FastSEQ for Windows Version 4.0
 NUMBER OF SEQ ID NOS:
 PRIOR APPLICATION NUMBER: 60/171,877 PRIOR FILING DATE: 1999-12-23
 LENGTH: 3
TYPE: PRT
 ORGANISM: Homo sapiens
 ENGTH:
 Local
 Local
 Local Similarity 100. es 1; Conservative
 12 D 12
 12 D 12
 12 D 12
 1 D 1
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 FastSEQ for Windows Version 4.0
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 Conservative
 35.3%;
 35.3%; Score 6; 1
100.0%; Pred. No.
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 35.3%; Score 6; DB 9; Length 3; 100.0%; Pred. No. 3.3e+05;
 Score 6;
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 0;
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 DB 9; L. vo. 3.3e+05; 0;
 DB 9; Length 3; . 3.3e+05;
 Length 3;
 Indels
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RESULT 9

RESULT 11
US-10-015-979-58
; Sequence 58, Application US/10015979
; Publication No. US20030036050A1

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US-10-039-876A-3
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 ; FEATURE:
; OTHER INFORMATION: Motif 2, corresponding to residues 156 to 158 of ; OTHER INFORMATION: SEQ ID NO:2
US-10-039-876A-4
 RESULT 10
US-10-039-876A-4
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 S
 US-10-039-876A-3
 SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 4 LENGTH: 3
 Sequence 3, Application US/10039876A Publication No. US20030032792A1 GENERAL INFORMATION:
 GENERAL INFORMATION:
 SEQ ID NO 3
 Matches
 Query Match
 Sequence 4, Application US/10039876A Publication No. US20030032792A1
 Matches
 Query Match
 CURRENT APPLICATION NUMBER: US/10/039,876A CURRENT FILING DATE: 2001-10-26 PRIOR APPLICATION NUMBER: US 60/061,712 PRIOR FILING DATE: 1997-10-06 PRIOR APPLICATION NUMBER: US 09/167,513 PRIOR FILING DATE: 1998-10-06
 CURRENT APPLICATION NUMBER: US/10/039,876A CURRENT FILING DATE: 2001-10-26 PRIOR APPLICATION NUMBER: US 60/061,712 PRIOR FILING DATE: 1997-10-06
 PRIOR APPLICATION NUMBER: US 09/167,513
PRIOR FILING DATE: 1998-10-06
NUMBER OF SEQ ID NOS: 28
 APPLICANT: Conklin, Darrell C.
APPLICANT: Blumberg, Hal
TITLE OF INVENTION: A HUMAN 2-19 PROTEIN HOMOLOGUE, 2219A
FILE REFERENCE: 97-63C1
 APPLICANT: Conklin, Darrell C.
APPLICANT: Blumberg, Hal
TITLE OF INVENTION: A HUMAN 2-19 PROTEIN HOMOLOGUE, Z219A
FILE REFERENCE: 97-63C1
 SOFTWARE: FastSEQ for Windows Version 3.0
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 TYPE: PRT
 ORGANISM: Artificial Sequence
 OTHER INFORMATION: Motif 1, corresponding to residues 127 to 129 of OTHER INFORMATION: SEQ ID NO: 2
 ORGANISM: Artificial Sequence FEATURE:
 Local Similarity
 Local Similarity
 12 D 12
 12 D 12
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D
 2 D 2
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 Conservative
 35.3%; Score 6; DB 9; Le 100.0%; Pred. No. 3.3e+05;
 35.3%; Score 6; DB 9; Le 100.0%; Pred. No. 3.3e+05;
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 Length 3;
 Indels
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 Gaps
 Gaps
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RESULT 13
US-10-226-956-317
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 ; OTHER INFORMATION: Synthetic peptide US-10-226-956-316
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 US-10-226-956-316
 ; LOCATION: (1)..(3); OTHER INFORMATION: US-10-015-979-58
 NUMBER OF SEQ ID NOS: 320
SOFTWARE: Patentin version 3.1
SEQ ID NO 316
 Matches
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 GENERAL INFORMATION:
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 Sequence 316, Application US/10226956 Publication No. US20030060399A1
 SOFTWARE: PA
 CURRENT APPLICATION NUMBER: US/10/226,956
CURRENT FILING DATE: 2002-08-23
PRIOR APPLICATION NUMBER: 60/314,535
 APPLICANT: Seal, Brandon L.
TITLE OF INVENTION: REAGENTS AND METHODS FOR SMOOTH MUSCLE THERAPIES
FILE REFERENCE: ASU-1061-US
 APPLICANT: Brophy, Colleen
 CURRENT APPLICATION NUMBER: US/10/015,979
CURRENT FILING DATE: 2001-12-10
PRIOR APPLICATION NUMBER: PCT/NL00/00399
PRIOR FILING DATE: 2000-06-09
PRIOR APPLICATION NUMBER: 60/138,443
PRIOR FILING DATE: 1999-06-10
 NUMBER OF SEQ ID NOS: 99
 ORGANISM: Artificial Sequence
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 TILE REFERENCE: 2183-5207US
 FEATURE:
 ORGANISM: Artificial sequence
 NAME/KEY: SITE
 FEATURE:
 PPLICANT: Quax, Wilhelmus J.
PPLICANT: Verhaert, Raymond M.D.
 ENGTH:
 PPLICANT: Beekwilder, Martinus J.
PPLICANT: Aehle, Wolfgang
ITLE OF INVENTION: Enzyme Selection
 ENGTH:
 Local Similarity
 Local Similarity 100. les 1; Conservative
 INFORMATION:
 12
 12
 3 D 3
 PatentIn version 3.1
 D 12
 D 1
 D 12
 Komalavilas, Padmini
Panitch, Alyssa
 Joshi, Lokesh
 Conservative
 35.3%; 5
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 35.3%; Score 6; DB (100.0%; Pred. No. 3.)
tive 0; Mismatches
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o. 3.3e+05;
 DB 9; Length 3; 3.3e+05;
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WESULT 15
US-10-226-956-319
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 ; OTHER INFORMATION: Synthetic peptide US-10-226-956-318
; Sequence 319, Application US/10226956
; Publication No. US20030060399A1
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 Query Match
Best Local Similarity
Thes 1; Conserv
 US-10-226-956-318
 ; OTHER INFORMATION: Synthetic peptide US-10-226-956-317
 Query Match
Best Local Similarity
 CURRENT APPLICATION NUMBER: US/10/226,956
CURRENT FILING DATE: 2007-08-23
PRIOR APPLICATION NUMBER: 60/314,535
PRIOR FILING DATE: 2001-08-23
NUMBER OF SEQ ID NOS: 320
SOFTWARE: Patentin version 3.1
SEQ ID NO 317
 SOFTWARE: PatentIn version 3.1 SEQ ID NO 318
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CURRENT FILING DATE: 2002-08-23
 TITLE OF INVENTION: REAGENTS AND METHODS FOR SMOOTH MUSCLE THERAPIES FILE REFERENCE: ASU-1061-US
 LENGTH: 3
TYPE: PRT
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 TITLE OF INVENTION: REAGENTS AND METHODS FOR SMOOTH MUSCLE THERAPIES FILE REFERENCE: ASU-1061-US
 APPLICANT: Brophy, Colleen
 LENGTH: 3
TYPE: PRT
 NUMBER OF SEQ ID NOS:
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 APPLICANT:
 APPLICANT:
 APPLICANT: Brophy, Colleen
 FEATURE:
 ORGANISM: Artificial sequence
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 ORGANISM: Artificial sequence
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 12 D 12
 1 p 1
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 D 1
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 Panitch, Alyssa
 Komalavilas, Padmini
 Panitch, Alyssa
 Joshi, Lokesh
 Seal, Brandon L.
 Komalavilas,
 Application US/10226956 o. US20030060399A1
 Application US/10226956
5. US20030060399A1
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ilarity 100.0%;
Conservative (
 35.3%;
ilarity 100.0%;
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 Padmini
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APPLICANT: Brophy, Colleen

APPLICANT: Kommalavilas, Padmini
APPLICANT: Panitch, Alyssa
APPLICANT: Joshi, Lokesh
APPLICANT: Seal, Brandon L.
TITLE OF INVENTION: REAGENTS AND METHODS FOR SMOOTH MUSCLE THERAPIES
FILE REFERENCE ASU-1061-US
CURRENT APPLICATION NUMBER: US/10/226,956
CURRENT FILING DATE: 2002-08-23
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PRIOR FILING DATE: 2001-08-23
SOFTWARE: Patentin version 3.1
SEQ ID NO 319
LENGTH: 3
TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Synthetic peptide
US-10-226-956-319
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Search completed: June 5, 2003, 15:49:05 Job time: 14.5455 secs
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GenCore version Copyright (c) 1993 - 2003

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Title:
Perfect score:
Sequence:
 Post-processing: Minimum Match 0% Maximum Match 100%
Listing first 45 summaries
 Total number of hits satisfying chosen parameters:
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 Maximum
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1 XXXXXXXXXXXX 12
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pir3:*
pir4:*
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protein-glutamine cholecystokinin-5 spinal cord peptid mitosis inhibiting tram protein - Esc 20% protein anti major protein anti endo-1/-beta vyla photosystem I 10.4 Ig heavy chain CRD Ig heavy chain CRD Ig heavy chain CRD T-cell receptor be T-cell receptor be T-cell receptor be T-cell receptor be T-cell receptor be T-cell receptor be T-cell receptor be T-cell receptor be T-cell receptor be T-cell receptor be T-cell receptor be T-cell receptor be T-cell receptor be T-cell receptor be T-cell receptor be T-cell receptor be T-cell receptor be T-cell receptor be
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 Ig heavy chain CRD
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 metallothionein-A
 achatin-I -
 protein D - E
hypothetical
 biotin A
 Description
 U
 D - Escher
 C;Accession: I40697
R;Shiuan, D.; Campbell, A.
Gene 67, 203-211, 1988
A;Title: Transcriptional regulation and gene arrangement of Escherichia coli, Citroba
A;Reference number: I40697; MUID:89006280; PMID:2971595
A;Accession: I40697
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D41654
 biotin A - Citrobacter freundii (fragment)
C:Species: Citrobacter freundii
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C;Accession: A4189
R;Slettan, A.; Gebhardt, K.; Kristiansen, E.; Birkeland, N.K.; Lindqvist. B
 Q,
 R;Slettan, A.; Gebhardt, K.; Kristiansen, E.; Birkeland, N.K.; Lindqvist, B.H.
J. Bacteriol. 174, 4094-4100, 1992
A;Title: Escherichia coli K-12 and B contain functional bacteriophage P2 ogr ge
A;Reference number: A41890; MUID:92283767; PMID:1597424
A;Accession: A41890
A;Status: preliminary
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A;Residues: 1-4 <SLE>
A;Cross-references: GB:M81463
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A;Cross-references: GB:M21922; NID:g144434
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hypothetical protein (sodC 5' region) - Haemophilus parainfluenzae (fragment) C;SpecLes: Haemophilus parainfluenzae C;Date: 12-Jun-1992 #sequence_revision 12-Jun-1992 #text chance C;Accession: D41654
 R;Olsson, P.E.; Kling, P.; Erkell, L.J.; Kille, Eur. J. Biochem. 230, 344-349, 1995
A;Title: Structural and functional analysis of t A;Reference number: I51049; MUID:95324545; PMID:
 A;Title: Copper-zinc superoxide dismutase of Haemophilus A;Reference number: A41654; MUID:92041655; PMID:1938942 A;Accession: D41654 A;Status: preliminary A;Molecule type: DNA A
 A; Title: Structural and fun A; Reference number: I51049; A; Accession: I51049
 C;Species: Oncorhynchus mykiss (rainbow trout)
C;Date: 13-Sep-1996 *sequence_revision 13-Sep-1996
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 Biochem. Biophys. Res. Commun. 160, 1015-1020, 1989
A;Title: Achatin-I, an endogenous neuroexcitatory tetrapeptide from Achatina fulica feru
A;Reference number: A32480; MUID:89273551; PMID:2597281
A;Accession: A32480
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A; Residues: 1-4 <OLS>
 A;Status: preliminary;
 C; Accession:
 metallothionein-A - rainbow trout (fragment)
 F;2/Modified site:
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 A; Reference number: A44691; MUID: 92354723;
 R; Ishida, T.; In, Y.; Inoue, M.; Yasuda-Kar
FEBS Lett. 307, 253-256, 1992
A; Title: Effect of the D-Phe(2) residue on
 A;Note: stereochemistry of the active form confirmed by chemical R;Ishida, T.; In, Y.; Inoue, M.; Yasuda-Kamatani, Y.; Minakata, I
 A; Molecule type: protein A; Residues: 1-4 < KAM>
 R;Kamatani, Y.; Minakata, H.; Kenny, P.T.M.; T. Biochem. Biophys. Res. Commun. 160, 1015-1020,
 achatin-I - giant African snail
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 A; Residues: 1-4
 R; Kroll,
 (H-Gly-Phe-Ala-Asp-OH)
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Matches 1
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;Species: Achatina fulica (giant African snail)
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 Eacteriol. 173, 7449-7457, 1991
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 D-phenylalanine (Phe) #status experimental
 EMBL: x80181; NID: g1019799; PIDN: CAA56466.1;
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 Iwashita, T.; Watanabe,
0, 1989
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 Length 4;
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 Indels
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 influenzae and Haemophilus
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 PID:g4379328
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RESULT 8
 B53284

T-cell receptor beta 2 chain D region, Dbeta2 - ra C; Species: Oryctolagus cuniculus (domestic rabbit) C; Date: 02-May-1994 #sequence_revision 18-Nov-1994 C; Accession: B53284
 A; Nolecule type: DNA
A; Molecule type: DNA
A; Residues: 1-4 <HAR>
A; Cross-references: GB:S60737; NID:g233916; PIDN:AAB19518.1; PID:g233918
A; Cross-references: GB:S60737; NCBI backbone (NCBIN:60737, NCBIP:60738)
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 C; Keywords: heterotetramer;
 C; Date: 30-Sep-1993
C; Accession: PT0271
 R;Harindranath, N.; Alexander, C.B.; Mage, R.G. Mol. Immunol. 28, 881-888, 1991
 A; Molecule type: DNA
A; Residues: 1-4 < YAM>
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 Species:
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Matches 1; Conserv
 Matches
 Local
 Local Similarity
 Homo sapiens
 12 D 12
 12 D 12
 12 D 12
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 ilarity 100.0%;
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 #sequence_revision 30-Sep-1993 #text_change 16-Aug-1996
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 Reichard, B.A.; Shane, S.; Caton,
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C;Species: Mus musculus (house mouse)
C;Date: 17-Jul-1992 #sequence\_revision 17-Jul-1992 #text\_change 30-May-1997
C;Accession: PT0635; PT0612; PT0545; PT0692; PT0552; PT0696

T-cell receptor beta chain V-D-J region (100-2N) - mouse (fragment

밁 Š

A; Reference number: A; Accession: PT0635

not shown

A; Title: Junctional sequences of A; Reference number: PT0509; MUID:

fetal T c:91277601;

cell receptor beta 1; PMID:1711558

chains have few N regions

Title: Junctional sequences of

R; Feeney,

A; Experimental source: A; Accession: PT0612

newborn thymus,

strain

BALB/c,

100-2N

Status: translation not shown

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A; Experimental source: A; Accession: PT0570
 A; Accession: PT0678
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 A; Experimental source: A; Accession: PT0545
 A; Molecule type:
A; Residues: 1-4
 A; Reference number: PT0509; MUID:91277601; A; Accession: PT0607
 A; Experimental source: A; Accession: PT0552
 A; Status: translation not shown
 A; Status: translation
 A; Accession: PT0711
 A; Experimental source: day 19 fetal
 A; Status: translation
 A; Molecule type: DNA
A; Residues: 1-4 <FE3>
 A;Molecule type:
A;Residues: 1-4 <
 A; Accession: PT0696
 A; Experimental source:
 Experimental source: newborn thymus, strain BALB/c, 120-2J; Accession: PT0674
 -cell receptor beta chain V-D-J region (120-2J) - mouse (fragment)
;Species: Mus musculus (house mouse)
;Date: 17-Jul-1992 #sequence_revision 17-Jul-1992 #text_change 30-May-1997
;Accession: PT0607; PT0674; PT0678; PT0570; PT0711; PT0710
 Status: translation not
 Residues: 1-4
 Residues: 1-4 <FE5>
 Molecule type: DNA
Residues: 1-4 <FE4
 Status: translation not shown
 Status: translation not shown
 Query Match
Best Local
 Molecule type: DNA
 Experimental source: day 18 fetal
 Status: translation
 Residues:
 Experimental source: newborn thymus, strain Keywords: T-cell receptor
 tle: Junctional
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 1-4 <FE2>
 1-4 <FE6>
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 1-4 <FE3>
 1-4 <FE5>
 1-4 <FE2>
 174, 115-124, 1991
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source: newborn thymus,
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 35.3%;
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 Score 6;
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R; Hsi, N.L.
 protein-glutamine gamma-glutamyltransferase (EC 2.3.2.13) - guinea pig (frac C;Species: Cavia porcellus (guinea pig)
C;Date: 10-Sep-1987 #sequence_revision 10-Sep-1987 #text_change 03-Mar-1995
C;Accession: A26209
R;Connellan, J.M.; Chung, S.I.; Whetzel, N.K.; Bradley, L.M.; Folk, J.E.
J. Biol. Chem. 246, 1093-1098, 1971
A;Title: Structural properties of guinea pig liver transglutaminase.
A;Reference number: A26209; MUID:71111415; PMID:5543674
A;Accession: A26209
 RESULT
C23751
 A; Experimental source: liver C; Keywords: aminoacyltransferase
 밁
 spinal cord peptide SCP-6 - pig
C;Species: Sus scrofa domestica (domest
C;Date: 28-Sep-1987 #sequence_revision
 g
 A; Molecule type: protein A; Residues: 1-5 <SHI>
 R;Shively, J.; Reeve Jr., J.R.; Eysselein, V.E.; Ben-Avram, C
Am. J. Physiol. 252, G272-G275, 1987
A;Title: CCK-5: sequence analysis of a small cholecystokinin
A;Reference number: A32516; MUID:87153871; PMID:3826354
 밁
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 C; Keywords: T-cell receptor
 S
 F;5/Modified site: amidated
 N;Alternate names: CCK-5
C;Species: Canis lupus familiaris (dog)
C;Date: 18-Oct-1989 #sequence_revision
 A26209
 C; Comment: This peptide corresponds to
 cholecystokinin-5 -
 A; Molecule type: protein A; Residues: 1-4 <CON>
 A; Reference number:
 A; Accession: A32516
 ;Superfamily: gastrin
;Superfamily: gastrin
;Keywords: amidated carboxyl end; neuropeptide
 ;Accession: C23/ou
l:Hsi, K.L.; Chen,
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hen, R.L.; Chen, Z.G.; Zhang,
Biophys. 240, 178-183, 1985
mber: A23751; MUID:85250425; I
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 CP-6 - pig
domestica (domestic pig)
comence revision 28-Sep-1987 #text_change 18-Aug-2000
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 #status experimental
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A; Accession: C23751 A; Status: prelimina

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A;Title: Identification and c
A;Reference number: A32014; M
A;Recession: A32014
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-5 <INA>
 RESULT 15
B31836
20K protein - Rickettsia rickettsii (fragment)
C;Species: Rickettsia rickettsii
C;Date: 31-Mar-1990 #sequence_revision 31-Mar-1990 #text_change 28-May-1999
 RESULT 14
A32014
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 A; Genome: plasmid
C; Keywords: DNA b
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 C;Superfamily: unassigned animal peptides C;Keywords: blocked amino end; pyroglutamic acid F;1/Modified site: pyrrolidone carboxylic acid (
 R;Reichelt, K.; Elgjo, K.; Edminson, P.D.
Blochem. Blophys. Res. Commun. 146, 1493-1501, 1987
A;Title: Isolation and structure of an epidermal mitosis inhibiting pentapeptide.
A;Reference number: A26830; MUID:87298602; PMID:3619940
A;Accession: A26830
 mitosis inhibiting peptide - mouse
C;Species: Mus musculus (house mouse)
C;Date: 19-Nov-1988 #sequence_revision 18-Aug-2000 #text_change 18-Aug-2000
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 A;Status: preliminary
A;Molecule type: protein
A;Residues: 1-5 <HSI>
 C; Genetics:
 R; Inamoto,
 C;Species: Escherichia coli
 tram protein - Escherichia coli plasmid R100 (fragment)
 A; Molecule type: protein A; Residues: 1-5 < REI>
 C; Accession: A26830
 C; Superfamily: unassigned animal peptides
 RESULT 13
 Query Match
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Matches 1
 Date: 22-Jun-1989 #sequence_revision 22-Jun-1989 #text_change 16-Feb-1997
 Matches
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 Accession: A32014
 Inamoto, S.; Yoshioka, Y.; Ohtsubo, Bacteriol. 170, 2749-2757, 1988
 Local Similarity 100 nes 1; Conservative
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nes 1; Conserv
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ive 0; Mismatches
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C;Accession: B31836
R;Anderson, B.E.; Baumstark, B.R.; Bellini, W.J.
J. Bacteriol. 170, 4493-4500, 1988
A;Title: Expression of the gene encoding the 17-kilodalton antigen from Rickettsia ri
A;Reference number: A91885; MUID:89008059; PMID:3139629
A;Accession: B31836
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 A;Cross-references: GB:J03371; NID:g152455; PIDN:AAD15030.1; PID:g4262874
Search completed: June 5, 2003, 15:34:01 Job time: 11.8182 secs
 A; Molecule type: DNA
A; Residues: 1-5 <AND>
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Scoring table: Sequence:

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112892 seqs, 41476328 residues

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SEQUENCE 3 A
 entities
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J. Bacteriol. 172:6797-6802(1990).

T. Bacteriol. 172:6797-6802(1990).

FUNCTION: ACUL PROPERI SYNTHETASE ACTIVATES TETRADECANOIC ACID.

IT IS A COMPONENT OF THE FATTY ACID REDUCTASE COMPLEX RESPONSIBLE FOR CONVERTING TETRADECANOIC ACID TO THE ALDEHYDE WHICH SERVES AS SUBSTRATE IN THE LUCIFERASE-CATALYZED REACTION.

CATALYTIC ACTIVITY: ATP + an acid + protein - AMP + diphosphate + an acyl-protein thiolester.

-I- PATHWAY: Bioluminescent fatty acid reduction system; second step.
 LUXE_VIBFI STANDARD; PRT; 3 AA. P24272; P24272; Ol-MAR-1992 (Rel. 21, Created) Ol-MAR-1992 (Rel. 21, Last sequence update) Ol-OCT-1996 (Rel. 34, Last annotation update) Long-chain fatty_acid-luciferin-component ligase
 This SWISS-PROT entry is copyright. It is produced through a collab between the Swiss Institute of Bioinformatics and the EMBL outset the European Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for com
 MEDLINE-91072226; Pubmed-2254256; MEDLINE-91072226; Pubmed-2254256; MEDLINE-PUBMENT S., Graham A
 Swartzman E., Kapoor S., Graham A.F., Me:
"A new Vibrio fischeri lux gene precedes
 Bacteria; Proteobacteria;
NCBI_TaxID=668;
 protein synthetase) (Fragment).
 EMBL; M62812; -;
 Vibrio fischeri
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LCK2_LEUMA
LCK4_LEUMA
LCK4_LEUMA
LCK7_LEUMA
LCK7_LEUMA
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ORMY_ORCLI
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ALL4\_CARMA
ALL4\_CARMA
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FARB\_CALVO
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UF04\_MOUSE
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 Query Match
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Matches 1
 Octopus minor.*;
Peptides 21:623-630(2000).
-!- FUNCTION: Cardioactive
 MEDLINE-20336815; PubMed-10876044; Iwakoshi E., Hisada M., Minakata H
 MOD_RES
 TISSUE-Brain
 SEQUENCE, SYNTHESIS,
 15-JUN-2002 (Rel.
15-JUN-2002 (Rel.
15-JUN-2002 (Rel.
 CIMI
 Fujimoto K., Kubota I., Yasuda-Kamatani Y., Minakata H., Yoshida M., Harada A., Muneoka Y., Kobayashi M.; "Purification of achatin: I from the atria of the African Achatina fulica, and its possible function."; Blochem. Blophys. Res. Commun. 177:847-853(1991).
 "Cardioactive peptides isolated from Octopus minor.":
 Incirrata; Octopodidae;
NCBI_TaxID-89766;
 Eukaryota; Metazoa;
Incirrata; Octopodi
 Octopus minor (Octopus)
 Cardioactive peptides
 CHARACTERIZATION.
STRAIN-Ferussac;
 Kamatani Y., Minakata H., Kenny P.T.M., Iwashita T., Wa
Funase K., Sun X.P., Yongsiri A., Kim K.H., Novales-Li
Novales E.T., Kanapi C.G., Takeuchi H., Nomoto K.;
"Achatin-I, an endogenous neuroexcitatory tetrapeptide
fullca Ferussac containing a D-amino acid residue.";
Biochem. Biophys. Res. Commun. 160:1015-1020(1989).
 SEQUENCE, CHARACTERIZATION, AND SYNTHESIS STRAIN-Ferussac; TISSUE-Ganglion; MEDLINE-89273551; PubMed-2597281;
 P58648;
 CP1_OCTMI
 (H-Gly-D-Phe-Ala-Asp-OH), an endogenous D-amino acid residue.";
 MEDLINE=93014529; PubMed=1399265;
 MEDLINE-91264856;
 Achatina fulica (Giant African snail)
Eukaryota; Metazoa; Mollusca; Gastropo
 K-RAY CRYSTALLOGRAPHY
 NCBI_TaxID-6530;
 Achatinacea; Achatinidae;
 Achatin-I
 15-JUL-1998 (Rel.
 Crystal
 [washita T., Nomoto K.;
 Shida T., In Y.,
 J. Pept. Protein Res. 39:258-264(1994).

J. Pept. Protein Res. 39:258-264(1994).

FUNCTION: NEUROEXCITATORY PEPTIDE; INCREASES THE IMPULSE AND PRODUCES A SPIKE BROADENING OF THE IDENTIFIED HEART F NEURON (PON); ALSO ENHANCES THE AMPLITUDE AND FREQUENCY (UNDER HAS ALSO AN EFFECT ON SEVERAL OTHER MUSCLES.
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 4 AA;
 Conservative
 Cardioactive;
 STANDARD;
 TISSUE=Heart atr
; PubMed=1675568;
 41, Last sequence up 41, Last annotation
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 Doi M., Inoue
 36,
 Mollusca; Cephalopoda;
 35.3%;
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 01-JAN-1990 (Rel. 13, Created)
01-JAN-1990 (Rel. 13, Last sequence update)
16-OCT-2001 (Rel. 40, Last annotation update)
Adenosylmethionine-8-amino-7-oxononanoate aminotransferase
(EC 2.6.1.62) (7,8-diamino-pelargonic acid aminotransferase
 MOD_RES
 Citrobacter
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 MEDLINE-20336815; PubMed=10876044; MEDLINE-20336815; PubMed=10876044; Iwakoshi E., Hisada M., Minakata H.; Iwakoshi E., Hisada M., Sinakata H.;
NCBI_TaxID=546;
 aminotransferase)
 BIOA_CITER
 "Cardioactive peptides isolated Octopus minor.";
 Bacteria;
 Peptides 21:623-630(2000).
 Eukaryota; Metazoa; Mol.
Incirrata; Octopodidae;
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 -! - MASS
 SEQUENCE, SYNTHESIS, MASS SPECTROMETRY,
 NCBI_TaxID-89766;
 Octopus minor (Octopus
 Cardioactive peptides Ocp-3/Ocp-4.
 15-JUN-2002 (Rel. 41, Created)
15-JUN-2002 (Rel. 41, Last sequence up
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 FUNCTION: Cardioactive; has be instropte effects on the heart active than OCP-3 SUBCELLULAR LOCATION: Secreted
 PTM: Ocp-2 has L-Phe instead of D-Phe. MASS SPECTROMETRY: MW=395.2; METHOD=MALDI
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SUBCELLULAR LOCATION: Secreted.
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 Ocp-4 has D-Ser instead of L-Ser. SPECTROMETRY: MW-395.2; METHOD-MALDI. D-amino acid.
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 "Transcriptional regulation and gene arrangement of Escherichia coli, Citrobacter freundii and Salmonella typhimurium biotin operons."; Gene 67:203-211(1988).
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 Biotin biosynthesis; Transferase; Aminotransferase;
 InterPro; IPR000954; Aminotran_3.
PROSITE; PS00600; AA_TRANSFER_CLASS_3; PARTIAL.
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P82070;
 EMBL; M21922; -;
 -1- MASS SPECTROMETRY: 1
 "The structure of new peptides from the Australin red 'Litoria rubella'. the skin peptide profile as a probe of evolutionary trends of amphibians."; hust. J. Chem. 49:955-963(1996)
 Tyler M.J., Wallace J.C
 rissue-skin
 NCBI_TaxID=104895;
 Pelodryadinae; Litoria.
 Amphibia; Batrachia; Anura; Neobatrachia;
 Eukaryota; Metazoa; Chordata;
 Rubellidin 1.
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 Pyridoxal phosphate.
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 s SWISS-PROT entry is copyright. It is produced through a collaboration ween the Swiss Institute of Bioinformatics and the EMBL outstation - European Bioinformatics Institute. There are no restrictions on its
 diaminononanoate.
COFACTOR: PYRIDOXAL PHOSPHATE.
PATHWAY: Biotin biosynthesis.
SUBUNIT: HOMODIMER.
 CATALYTIC ACTIVITY: S-adenosyl-L-methionine + 8-amino-7-
oxononanoate = S-adenosyl-4-methylthio-2-oxobutanoate + 7,8-
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 This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial
 Chlamydia trachomatis.
Bacteria; Chlamydiales; Chlamydiaceae; Chlamydia
NCBI_TaxID=813;
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30-MAY-2000 (Rel. 39, Last annotation update)
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 SEQUENCE FROM N.A. MEDLINE-88227859; PubMed-2836369;
 P13973;
 Pallini V.;
 Bini L., Santucci A., Magi
Comanducci M., Christianen
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P38005;
 EMBL; M20941; -;
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 MEDLINE=89335826; PubMed=2503057;
 Pseudomonas putida.
Bacteria; Proteobacteria;
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 De Angells M., Bini L., Pallini V., Cocconcelli P.S., Gobbetti M.;
"The acid-stress response in Lactobacillus sanfranciscensis CBl.";
Microbiology 147:1863-1873(2001).
 SEQUENCE
 16-OCT-2001
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 SEQUENCE
 NCBI_TaxID=303;
 Pseudomonas
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 SEQUENCE
 MEDLINE-21322712;
 Bacteria; Firmicutes;
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 Cydia pomonella (Codling moth).
Eukaryota; Metazoa; Arthropoda;
 Cydiastatin
 "Isolation and identification of multiple allatostatin superfamily in the shore crake Eur. J. Blochem. 250:727-734(1997).
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 30-MAY-2000
30-MAY-2000
 Neuropeptide;
SEQUENCE 7
 Eukaryota; Metazoa; Arthropoda; Mandibulata; Pancrustacea; Crustacea; Malacostraca; Eumalacostraca; Eucarida; Decapoda; Pleocyemata; Brachyura; Eubrachyura; Portunoidea; Portunidae; Carcinus. NCBI_TaxID-6759;
 P81807;
30-MAY-2000
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 -11 FUNCTION: MAY ACT AS A NEUROTRANSMITTER
-11 - SIMILARITY: BELONGS TO THE ALLATOSTATIN
NEUROPEPHIDE; MULTIGENE ÉRMILY.
SEQUENCE 7 AA; 782 MW; 672879CDCB476AC0
 Duve
 Carcinus maenas (Common shore crab)
 30-MAY-2000
 Phorpe A.;
 TISSUE-Cerebral ganglion, and Thoracic MEDLINE-98121193; PubMed-9461295;
 SEQUENCE.
 Carcinustatin
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 FMRFamide-like neuropeptide GDPFLRF-amide.
Helisoma trivolvis (Snail).
Eukaryota; Metazoa; Mollusca
 CHOX_ALCSP
P16101;
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 Duve H., Johnsen A.H., Maestro Davey M., East P.D., Thorpe A.;
 TISSUE-Larva;
MEDLINE-98054539;
 Ditrysia; Tortric
NCBI_TaxID=82600;
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 MEDLINE-81006769; PubMed-6997283; Ohta-Fukuyama M., Miyake Y., Emi
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MOD_RES 7 7
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 NCBI_TaxID=512;
 Alcaligenes
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 Tortricidae; Olethreutinae; Cydia.
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Mercler A.J., Orchard I., Tebrugge V.,
"Isolation of two FMRFamide-related per
pericardial organs.";
Peptides 14:137-143(1993).
 01-OCT-1994 (Rel. 30, Created)
01-OCT-1994 (Rel. 30, Last sequence up
01-OCT-1995 (Rel. 32, Last annotation
Cardioexcitatory FMRFamide homolog DF2
 Eukaryota; Metazoa; Arthropoda; Mandibulata; Pancrustacea; Crustacea; Malacostraca; Eumalacostraca; Eucarida; Decapoda; Pleocyemata; Astacoldea; Astacoldea; Cambaridae; Procambarus.
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MOD_RES 7 7 7
SEQUENCE 7 AA; 967 MW
 Procambarus clarkii (Red swamp crayfish).
 P38498;
01-OCT-1994
 Neuropeptide;
MOD_RES
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 Peptides 15:31-36(1994).
 MEDLINE=94286417; PubMed=7912428;
Madrid K.P., Price D.A., Greenberg M.J., Khan I
"FMRFamide-related peptides from the kidney of
 TISSUE-Pericardial organs;
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 NCBI_TaxID=6728;
 FUNCTION: INCREASES THE RATE AND AMPLITUDE OF SPONTANEOUS CONTRACTIONS OF SEMI-ISOLATED HEARTS. INCREASES THE AMPLITUDE EXCITATORY POSTSYNAPTIC POTENTIALS IN ABDOMINAL EXTENSOR MUSCI
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 01-OCT-2001 (TREMBLIEL 18, 01-OCT-2001 (TREMBLIEL 18, 01-OCT-2001 (TREMBLIEL 18,
 NIFK.
 Nifk (Fragment).
 Bacillus cereus.
Bacteria; Firmicutes;
Bacillaceae; Bacillus.
NCBI_TaxID=1396;
Synechococcus sp. (strain PCC 8801 / RF-1) (Cyanothece PCC 8801).
 88 kDa protein (Fragment).
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 MOD_RES
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 Eukaryota; Metazoa;
Mammalia; Eutheria;
 Sithigorngul P.,
 01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
FMRFamide-like neuropeptide FLP1 (DRNFLR-amide).
MACTODTACHIUM rosenbergii (Giant fresh water prawn).
Eukaryota; Metazoa; Arthropoda; Crustacea; Malacostraca;
Eumalacostraca; Eucarida; Decapoda; Pleocyemata; Caridea;
 Microbiology 145:743-753(1999).
EMBL; AF003700; AAC35193.1; -.
 Huang T.C., Lin R.F., Chu M.K., Chen H.M.;
"Organization and expression of nitrogen-fixation genes in the aerobic "itrogen-fixing unicellular cyanobacterium Synechococcus sp. strain
 Oryctolagus cuniculus (Rabbit).
 Alpha-myosin heavy
 TISSUE-EYESTALK;
 Eumalacostraca; Eucarida;
Palaemonoidea; Palaemonida
 SEQUENCE
 MEDLINE-99231861;
 STRAIN-RF-
 SEQUENCE FROM N.A.
 Neuropeptide;
 freshwater prawn Macrobrachium rosenbergii.";
Comp. Blochem. Physiol. 120B:587-595(1998).
-i- MASS SPECTROMETRY: MW-965.7; METHOD-MALDI.
 NCBI_TaxID=79674;
 01-MAR-2002
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 Bacteria; Cyanobacteria;
NCBI_TaxID=41431;
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 049223;
01-JUN-1998 (TrEMBLrel.
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SEQUENCE FROM N.A.
MEDLINE-84221901; PubMed-6328491;
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosideurosids I; Fabales; Fabaceae; Papillonoideae; Phaseoleae; Glycine
 ventricular myosin heavy operoc. Natl. Acad. Sci. U.S
EMBL; K01698; AAA31415.1;
 Mammalia; Eutheria; NCBI_TaxID=10116;
 STRAIN-CV. ESSEX; TISSUE-ROOT;
Mahalingam R., Knap H.T.;
Submitted (FEB-1998) to the EMBL/GenBank/DDBJ
EMBL; AF047050; AAC03556.1; -.
 Glycine max (Soybean)
 049223
 Friedman D.J., Rabinowitz M.;
 Eukaryota;
 Rattus norvegicus (Rat)
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 NCBI_TaxID=3847;
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MEDIINE-96198747; PubMed-8612486;
MEDIINE-96198747; Gao X.M.,
 Yoshikawa T., DuPont B.R., Leach R.J., Detera-Wadleigh S.D.; "New variants of the human and rat nuclear hormone receptor, expression and chromosomal localization of the human gene.";
 STRAIN-SPRAGUE-DAWLEY;
MEDLINE-96299786; PubMed-8661150;
 Yoshikawa T., Makino S., Gao
Detera-Wadleigh S.D.;
"Splice variants of rat TR4
 Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
 "Splice variants of rat TR4 orphan receptor: of novel sequences in the 5'-untranslated rec
 expression and chromosomal Genomics 35:361-366(1996).
 SEQUENCE FROM N.A.
 Orphan receptor
 01-JUN-1998
01-DEC-2001
 055184;
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 SEQUENCE
 EMBL; U59125;
 Detera-Wadleigh S.D.;
 SEQUENCE FROM N.A.
MEDLINE-96198747; PubMed-8612486;
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 EMBL;
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 Endocrinology 137:1562-1571(1996).
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 Coxiella burneti1.";
J. Bacteriol. 180:3816-3822(1998)
EMBL; AF064963; AAD09947.1; -.
 STRAIN-NINE MILE PHASE I;
MEDLINE-98348442; Pubmed-9683477;
Willems H. Jaeger C., Baljer G.;
"Physical and genetic map of the
 Bacteria; Proteobacteria; Coxiella group; Coxiella. NCBI_TaxID=777;
 01-NOV-1998 (TrEMBLrel.
01-DEC-2001 (TrEMBLrel.
Hypothetical 1.0 kDa pro
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SEQUENCE
 Brinkman F.S.L., Francis F.M., Dilion J.K.;
Brinkman F.S.L., Francis F.M., Dilion J.K.;
"Complexity of the variable sequence between the carbamo synthase genes of Neisseria species.";
Submitted (OCT-1997) to the EMBL/GenBank/DDBJ databases
 gonorrhoeae includes a large, ve
also present in other Neisseria
Microbiology 141:0-0(0).
 Neisseria meningitidis.
Bacteria; Proteobacteria;
 01-MAY-1999 (TrEMBLrel. 10, Last sequence update) 01-MAY-1999 (TrEMBLrel. 10, Last annotation update) Carbamoy1-phosphate synthase subunit B (Fragment).
 085406;
 085406
 "Organization of carbamoyi-phosphate synthase genes in Neisseria gonorrhoeae includes a large, variable intergenic sequence which also present in other Neisseria species.";
 Coxiella burnetii.
 01-NOV-1998
 EMBL; AF029361; AAC78449.1;
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RESULT 10 Q9RQ57 ,:ID Q9RQ5

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 Sequence evolution in bacterial endosymbionts having
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 EDLINE=20022990; PubMed=10555290;
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 Q56759;
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01-NOV-1996
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SEQUENCE FROM N.A.
MEDLINE-95255652; PubMed-7737502;
Asturias J.A., Diaz E., Timmis K.N.;
Asturias J.A., Diaz E., Timmis K.N.;
"Evolutionary relationship of the biphenyl dioxygenase of the gram-
positive bacterium Rhodococcus globerulus P6 to multicomponent
positive bacteria.";
 Dioxygenase.
NON_TER
SEQUENCE 8
 01-FEB-1997
01-FEB-1997
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 01-FEB-1997 (TrEMBLrel. 02, Last sequence update) 01-DEC-2001 (TrEMBLrel. 19, Last annotation update) Biphenyl dioxygenase (Fragment).
Xanthobacter autotrophicus
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NCBI_TaxID-33008;
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 EMBL; X80041;
 Bacteria;
 Rhodococcus
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 Hypothetical protein.
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 Sampei G.,
 Mori H.,
 Kimura S.,
 Ikemoto
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 MEDLINE=97061202; PubMed=8905232;
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., Seki Y., Tagami H., Takemoto
 Horiuchi T.;
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Takemoto K., Wada C., Yamamoto Y.,
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01-DEC-2001 (TrEMBLrel. 19, Last sequence update)

01-DEC-2001 (TrEMBLrel. 19, Last annotation update)

01-DEC-2001 (TrEMBLrel. 19, Last annotation update)

Photosystem I iron-sulfur center (Photosystem I subunit VII) (9 kDa polypeptide) (PSI-C) (Fragment).

Anabaena sp. (strain L31).

Bacteria; Cyanobacteria; Nostocales; Nostocaceae; Anabaena.

NCBL_TaxID-29412;
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STRAIN-GJ10, AND CV. M50;
MEDLINE-95173113; PubMed-7868610;
Wan der Ploeg J., Willemsen M., van Hall G., Janssen D.B.;
Van der Ploeg J., Willemsen M., van Hall G., Janssen D.B.;
*Adaptation of Xanthobacter autotrophicus GJ10 to bromoacetate due to activation and mobilization of the haloacetate dehalogenase gene by
 SEQUENCE
 Photosynthesis; Photosystem I; Iron-súlfur; NON_TER 8 8
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 insertion element IS1247.";
J. Bacteriol. 177:1348-1356(1995).
EMBL; X84038; CAA58857.1; -.
 Bacteria; Proteobacteria; alpha subdivision; Rhizobiaceae group; Hyphomicrobium group; Xanthobacter.
NCBI_TaxID=280;
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Maximum DB seq length: 2000000000
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 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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US-09-791-537-103695

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US-09-791-537-103704

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| Sequence 4348 | quence 32245, A | e 20,   | equence 20, App | 20, App       | 20,       | e 20, App     | quence 20     | 6, Appl  | 32,             | equence 31, App | e 30, App      | 6, AF        | equence 100507     | equence 12625    | equence 22679,   | e 41676,         | e 25751,         | e 11175,         | .o.          | e 88724,         | e 86827,         | e 2, Appl     | e 85735,         | 13741            | Sequence 120755, | 10374            | e 10374          | e 10373          | e 10373        | e 10373          | e 10372          | equence 1037     | equence 10371 | equence 10371 | e 10371       | equence 10371     | equence 103       | 0370                 |

## ALIGNMENTS

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PRIOR FILING DATE: 1998-12-24
NUMBER OF SEQ ID NOS: 19
SOPTWARE: Patentin Ver. 2.1
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LENGTH: 204
TYPE: PRT
ORGANISM: Streptococcus pyogenes
US-09-869-136-9
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 US-09-869-136-9
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 Sequence 9, Application US/09869136 GENERAL INFORMATION:
 CURRENT APPLICATION NUMBER: US/09/869,136
CURRENT FILLING DATE: 2001-07-20
PRIOR APPLICATION NUMBER: PCT/NZ99/00228
PRIOR FILING DATE: 1999-12-24
 APPLICANT: FRASER, JOHN DAVID APPLICANT: PROFT, THOMAS TITLE OF INVENTION: SUPERANTIGENS FILE REFERENCE: 3911-8
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APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: METHODS OF USE THEREOF
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
 APPLICANT: Danzer, Joseph
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 FILE REFERENCE: 261/210
 APPLICANT:
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CURRENT FILING DATE: 2001-02-22
 APPLICANT: DEDE, DELEK
APPLICANT: DANZET, JOSEPH
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
 CURRENT FILING DATE: 2001-02-22
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 APPLICANT: Bionomix, Inc
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 ENGTH: 209
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 US-09-791-537-103704
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 CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
 APPLICANT: Danzer, Joseph TITLE OF INVENTION: THREE INVENTION: METHO
 APPLICANT:
 CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
 APPLICANT: Danzer, Joseph TITLE OF INVENTION: THREE I
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APPLICANT: Danzer, Joseph
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TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBITITLE OF INVENTION: METHODS OF USE THEREOF
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CURRENT FILING DATE: 2001-02-22
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CURRENT FILING DATE: 2001-02-22
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 APPLICANT: Bionomix, Inc.
APPLICANT: Debe, Derek
 PPLICANT: Danzer, Joseph
ITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
 TYPE: PRT
 PPLICANT: Danzer, Joseph
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ORGANISM: Streptococcus pyogenes
US-09-791-537-103717
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US-09-791-537-103712
 JS-09-791-537-103715
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 GENERAL INFORMATION
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 APPLICANT: Danzer, Joseph TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY METITLE OF INVENTION: METHODS OF USE THEREOF FILE REFERENCE: 261/210
 APPLICANT: Bionomix, Inc.
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 APPLICANT: Danzer, Joseph
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TITLE OF INVENTION: METHODS OF USE THEREOF
 PPLICANT: Danzer, Joseph
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US-10-172-425B-33
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SOFTWARE: FastSEQ for
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LENGTH: 14
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APPLICANT: SHAW, KAREN J.
APPLICANT: SHAWE JR., GEORGE H.
APPLICANT: KESSLER, MARCO
APPLICANT: NOLLING, JORK
APPLICANT: ZENG, QIANDONG
APPLICANT: ZENG, QIANDONG
APPLICANT: GREENE, JONATHAN R.
TITLE OF INVENTION: ASPERGILLUS FUMIGATUS NUCLEIC ACIDS
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: 2976-4020US1
 CURRENT APPLICATION NUMBER: US/09/675,784A
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 PRIOR APPLICATION NUMBER: 09/150,947
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: PCT/IL97/00438
PRIOR FILING DATE: 1997-12-30
PRIOR APPLICATION NUMBER: ISRAEL 119938
PRIOR FILING DATE: 1996-12-30
 TITLE OF INVENTION: BROAD SPECTRUM ANTAGONISTS AND VACCINES TITLE OF INVENTION: DIRECTED AGAINST PYROGENIC EXOTOXINS FILE REFERENCE: A31967-PCT-USA-A-A 066031.0164 CURRENT APPLICATION NUMBER: US/10/172,425B CURRENT FILING DATE: 2002-06-13
 LENGTH: 14
TYPE: PRT
 NUMBER OF SEQ ID NOS:
 APPLICANT: Kaempfer, Raymond
APPLICANT: Arad, Gila
 equence 37, Application US/10172425B ENERAL INFORMATION:
 NUMBER OF SEQ ID NOS: 13925
 PRIOR FILING DATE: 1999-09-29
 PRIOR APPLICATION NUMBER: 60,
 ORGANISM: Enterococcus faecalis
 TYPE: PRT
 ENGTH: 115
 Local Similarity
tes 5; Conserv
 126 KSDTTDQESD 135
 5 KKSVTAQELD 14
 1 KXXXTXQEXD 10
 1 KXXXTXQEXD 10
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 PatentIn version 3.1
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 77.48;
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 Score 23;
Pred. No.
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 DB 6; Length 14;
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US-10-203-536-1
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 ; OTHER INFORMATION: Clone ID: PAT_MRT3847_137368C.1.pep US-10-424-599-184221
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 US-10-424-599-184221; Sequence 184221, A
 RESULT 6
 US-09-134-000C-6190
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 US-09-134-000C-6190
 RESULT
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LENGTH: 134
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 SOFTWARE: PatentIn version 3.1
SEQ ID NO 6190
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 GENERAL INFORMATION:
 Sequence 6190,
 Matches
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 APPLICANT: Cao Yongwei
TITLE OF INVENTION: SQU vucleic acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
RUMMBER OF SEQ ID NOS: 285684
 CURRENT APPLICATION NUMBER: U5/09/134,000C CURRENT FILING DATE: 1998-08-13 PRIOR APPLICATION NUMBER: US 60/055,778 PRIOR FILING DATE: 1997-08-15
 TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO TITLE OF INVENTION: ENTEROCOCCUS FAECALIS FOR DIAGNOSTICS AND THERAPEUTICS FILE REFERENCE: 032796-032
 APPLICANT:
 APPLICANT: La Rosa Thomas
 NUMBER OF SEQ ID NOS: 6812
 APPLICANT:
 APPLICANT: Zhou Yihua
 ORGANISM: Glycine max
 TYPE: PRT
 FEATURE:
 ORGANISM: Enterococcus faecalis
 21 KTHDTSQELD 30
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 1 KXXXTXQEXD 10
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 KKFSTSQEVD
 KKFSTSQEVD
 Lynn Doucette-Stamm et al
 Kovalic David K
 Conservative
 Application US/09134000C
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 Application US/10424599
 94
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 74.2%;
 74.28;
 74.2%;
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 Length 115;
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; Sequence 1, Application US/10203536
; GENERAL INFORMATION:

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 RESULT 9
US-10-424-599-179861
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 RESULT 8
US-09-751-708A-12
 ; ORGANISM: Staphylococcus aureus US-09-751-708A-12
 ; OTHER INFORMATION: Staphylococcal enterotoxin SEC-SER
US-10-203-536-1
 Sequence 12, Application US/09751708A GENERAL INFORMATION:
APPLICANT: TERMAN, David S
 Query Match
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 SOFTWARE: PatentIn version 3.1
SEQ ID NO 1
LENGTH: 228
 Sequence 179861, Application US/10424599 GENERAL INFORMATION:
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 CURRENT APPLICATION NUMBER: US/09/751,708A CURRENT FILING DATE: 2002-10-15 PRIOR APPLICATION NUMBER: US 60/173,371 PRIOR FILING DATE: 1999-12-28 NUMBER OF SEQ ID NOS: 166 SOFTWARE: Patentin version 3.1
 APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)B
 TITLE OF INVENTION:
 PRIOR APPLICATION NUMBER: PCT/KR00/01241
PRIOR FILING DATE: 2000-10-31
PRIOR APPLICATION NUMBER: KR 2000-0007612
PRIOR FILING DATE: 2000-02-17
 CURRENT APPLICATION NUMBER: US/10/203,536
CURRENT FILING DATE: 2002-08-12
 APPLICANT:
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 APPLICANT: La Rosa Thomas J
 FILE REFERENCE: 751708
 NUMBER OF SEQ ID NOS:
 TITLE OF INVENTION: Production Method Thereof, FILE REFERENCE: 0808-0329P
 LENGTH: 266
TYPE: PRT
 PPLICANT:
 FEATURE:
 ORGANISM: Artificial Sequence
 TYPE: PRT
 ITLE OF INVENTION: Staphylococcal Enterotoxin SEC-SER, Expression Vector and Host Court of INVENTION: Production Method Thereof, and Manufacturing Method of Vaccine
 Local Similarity les 5; Conserv
 Local Similarity es 5; Conserv
 140 KKSVTAQELD 149
 178 KKSVTAQELD 187
APPLICATION NUMBER: US/10/424,599
 1 KXXXTXQEXD 10
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 Zhou Yihua
 LEE, Yong-Jun
 Kovalic David K
 CHANG,
 HAN, Kyu-Boem
 Conservative
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 Yong-Ho
 Byoung-Sun
 COMPOSITIONS AND METHODS FOR TREATMENT OF NEOPLASTIC DISEASE
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 74.2%;
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Pred. No.
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US-10-431-652-7705
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US-10-431-652-7705
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US-60-440-068-124
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 ; OTHER INFORMATION: Clone ID: PAT_MRT3847_13342C.1.pep US-10-424-599-179861
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CURRENT FILING DATE: 2003-01-14
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NUMBER OF SEQ ID NOS
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 TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES ASSOCIATED WITH THE TITLE OF INVENTION: NF-KB PATHWAY FILE REFERENCE: 3053-4191
 CURRENT FILING DATE: 2003-05-06
PRIOR APPLICATION NUMBER: US 09/328,352
PRIOR FILING DATE: 1999-06-04
 APPLICANT: NADLER, STEVEN G. APPLICANT: CARMAN, JULIE
 PRIOR APPLICATION NUMBER: US 60/088,701 PRIOR FILING DATE: 1998-06-09
 TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTE TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS FILE REFERENCE: PATH03-08
 CURRENT APPLICATION NUMBER: US/10/431,652
 APPLICANT: Breton, Gary APPLICANT: Bush, David
 ORGANISM: Glycine max FEATURE:
 TYPE: PRT
 LENGTH: 281
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 2003-04-28
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Mismatches

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KXXXTXQEXD 10

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RESULT 14
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 RESULT 12
US-09-150-947F-3
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 US-09-150-947F-4
 US-09-150-947F-3
 US-09-150-947F-4
 Sequence 3, Application US/10172425B GENERAL INFORMATION:
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 SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 3 LENGTH: 10 TYPE: PRT
 Sequence 3, Application US/09150947F GENERAL INFORMATION:
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 Sequence 4, Application US/09150947F GENERAL INFORMATION:
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APPLICANT: Kaempfer, Raymond APPLICANT: Arad, Gila
 TITLE OF INVENTION: BROAD SPECTRUM PYROGENIC EXOTOXINS ANTAGONISTS VACCINES FILE REFERENCE: A31967-PCT-USA-A 066031.0102 CURRENT APPLICATION NUMBER: US/09/150,947F
CURRENT FILING DATE: 1998-09-10
 TITLE OF INVENTION: BROAD SPECTRUM PYROGENIC EXOTOXINS ANTAGONISTS VACCINES FILE REFERENCE: A31967-PCT-USA-A 066031.0102 CURRENT APPLICATION NUMBER: US/09/150,947F CURRENT FILING DATE: 1998-09-10 PRIOR APPLICATION NUMBER: PCT/IL97/00438 PRIOR FILING DATE: 1997-12-30
 PRIOR APPLICATION NUMBER: PCT/IL97/00438 PRIOR FILING DATE: 1997-12-30
 APPLICANT: Kaempfer, Raymond APPLICANT: Arad, Gila
 SOFTWARE: FastSEQ for Windows Version 4.0
 NUMBER OF SEQ ID NOS:
 PRIOR FILING DATE: 1996-12-30
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 APPLICANT: Kaempfer, Raymond APPLICANT: Arad, Gila
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 ; TYPE: PRT; ORGANISM: Staphylococcus aureus US-10-172-425B-3
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SOFTWARE: FastSEQ for Windows Version 4.0
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 TITLE OF INVENTION: BROAD SPECTRUM ANTAGONISTS AND VACCINES TITLE OF INVENTION: DIRECTED AGAINST PYROGENIC EXOTOXINS FILE REFERENCE: A31967-PCT-USA-A-A 066031.0164 CURRENT APPLICATION NUMBER: US/10/172,425B CURRENT FILING DATE: 2002-06-13
 PRIOR APPLICATION NUMBER: 09/150,947
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: PCT/IL97/00438
PRIOR FILING DATE: 1997-12-30
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PRIOR FILING DATE: 1996-12-30
NUMBER: 1596-12-30
 TITLE OF INVENTION: BROAD SPECTRUM ANTAGONISTS AND VACCINES TITLE OF INVENTION: DIRECTED AGAINST PYROGENIC EXOTOXINS FILE REFERENCE: A31967-PCT-USA-A-A 066031.0164 CURRENT APPLICATION NUMBER: US/10/172,425B CURRENT FILING DATE: 2002-06-13
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PRIOR FILING DATE: 1997-12-30
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Title:
Perfect score:
Sequence:
 Minimum
Maximum
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Maximum Match 100%
Listing first 45 summaries
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 358
358
358
378
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378
 GenCore version 5.1.6 (c) 1993 - 2003 Compugen Ltd
 B
 27
22
19
21
21
 US-60-360-039-12686

US-09-733-089-15924

US-09-816-660-16924

US-09-513-996A-43459

US-09-708-427-18784

US-09-791-537-114720
 SUMMARIES
 COMB.pep:*
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 4569144
 Description
Sequence 12686, I
Sequence 16924, I
Sequence 16924, I
Sequence 43459, I
Sequence 18784, I
Sequence 114720,
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## ALIGNMENTS

US-60-360-039-12686; Application US/60360039

RESULT 1

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APPLICANT: Goldman, Barry S.

APPLICANT: Hinkle, Gregory J.

APPLICANT: Slater, Steven C.

TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES

FILE REFERENCE: 38-10(52052)A

CURRENT APPLICATION NUMBER: US/60/360,039

CURRENT FILING DATE: 2002-02-21

NUMBER OF SEQ ID NOS: 47374

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LENGTH: 310

TYPE: PRT

ORGANISM: Aspergillus midulans

FEATURE:

ORGANISM: Aspergillus midulans
 NAME/KEY: unsure
; LOCATION: (1)..(310)
; OTHER INFORMATION: un
US-60-360-039-12686
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73.1%; ilarity 40.0%; Conservative
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Score 19; DB 27;
Pred. No. 2.4e+03;
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 Gaps
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 SEQ ID NO 16924
 PRIOR APPLICATION NUMBER: US 09/620,392 PRIOR FILING DATE: 2000-07-19 NUMBER OF SEQ ID NOS: 24143
 CURRENT APPLICATION NUMBER: US/09/816,660
 PRIOR APPLICATION NUMBER: US 09/620,392 PRIOR FILING DATE: 2000-07-19
 FILE REFERENCE: 38-21(15300)D
CURRENT APPLICATION NUMBER: US/09/733,089
CURRENT FILING DATE: 2000-12-11
 PRIOR APPLICATION NUMBER: US 09/474,435
 FILE REFERENCE:
 TYPE: P
 NUMBER OF SEQ ID NOS:
 PRIOR APPLICATION NUMBER: US 09/474,435
ORGANISM: Arabidopsis thaliana
9-816-660-16924
 ORGANISM: Arabidopsis thaliana
 ITLE OF INVENTION:
 ENGTH:
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 Local Similarity
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 APPLICATION NUMBER: US 09/733,089
FILING DATE: 2000-12-11
APPLICATION NUMBER:) US 09/
 APPLICATION NUMBER: US 09/654,617 FILING DATE: 2000-09-05
 FILING DATE: 2000-10-10
 FILING DATE: 2000-09-05
 INFORMATION:
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 INVENTION: Nucleic Acid Molecules And Other Molecules Associated With
 INVENTION: Nucleic Acid Molecules And Other Molecules Associated With INVENTION: Transcription In Plants
 KKAADAAALD 51
 KKTTAAFALD 82
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 Dotson, Stanton B.
 Kovalic, David K.
 McIninch, James
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 cIninch, James
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 Application US/09816660
 Application US/09733089
 38-21(15300)D
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 David
 73.1%;
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 ; OTHER INFORMATION: Ceres Seq. ID 1834815 US-09-708-427-18784
 ; OTHER INFORMATION: Location 1..378 / Ceres US-09-513-996A-43459
 US-09-513-996A-43459
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 SOFTWARE: PatentIn version 3.1 SEQ ID NO 18784
 Sequence 18784, App. GENERAL INFORMATION
 Matches
 SEQ ID NO 43459
 GENERAL INFORMATION
 Matches
 Query Match
Best Local
 CURRENT APPLICATION NUMBER: US/09/708,427
CURRENT FILING DATE: 2000-11-09
 APPLICANT: N. ALEXANDROV et al.
TITLE OF INVENTION: SEQUENCE DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTID
TITLE OF INVENTION: THEREBY
 CURRENT APPLICATION NUMBER: US/09/513,996A CURRENT FILING DATE: 2000-02-25
 NUMBER OF SEQ ID NOS: 85364
 FILE REFERENCE:
 NUMBER OF SEQ ID NOS: 81028
 TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTID TITLE OF INVENTION: ENCODED THEREBY
 FILE REFERENCE:
 APPLICANT: N. ALEXANDROV et al.
 FEATURE:
NAME/KEY: UNSURE
LOCATION: 1..378
OTHER INFORMATION: any n or xaa - unknown
 LOCATION: 1..378
OTHER INFORMATION: Xaa is any amino acid
 ORGANISM: Arabidopsis thaliana
 ORGANISM: Arabidopsis thaliana
 NAME/KEY: misc_feature LOCATION: 1..378
 NAME/KEY: misc_feature
 EATURE:
 ENGTH:
 ENGTH: 378
 Local Similarity
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 13 KKAADAAALD
 42 KKAADAAALD
 1 KKXXXXXXLD 10
 1 KKXXXXXXLD 10
 1 KKXXXXXXLD 10
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4; Conservative
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 Application US/09708427
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 40.08;
 73.18;
 73.18;
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 Score 19;
Pred. No.
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 Indels
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 US-60-356-051-2815; Sequence 2815, Application US/60356051
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 US-10-221-279-10068
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 ; ORGANISM: Arabidopsis thaliana US-09-791-537-114720
 US-09-791-537-114720
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 SOFTWARE: PatentIn version 3.1 SEQ ID NO 2815
 Sequence 114720, Application US/09791537 GENERAL INFORMATION:
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 SEQ ID NO 114720
 APPLICANT: Hyseq, Inc
TITLE OF INVENTION: Movel Nucleic Acids and Polypeptides
FILE REFERENCE: 21272-046
CURRENT APPLICATION NUMBER: US/10/221,279
CURRENT FILING DATE: 2002-09-06
 CURRENT APPLICATION NUMBER: US/60/356,051
CURRENT FILING DATE: 2002-02-11
NUMBER OF SEQ ID NOS: 2926
 APPLICANT: Lutfiyya, Linda L
TITLE OF INVENTION: NUCLEIC ACIDS AND OTHER MOLECULES ASSOCIATED WITH
TITLE OF INVENTION: TRANSCRIPTION IN PLANTS
FILE REFERENCE: 38-21 (15300)I
 APPLICANT: Monsanto Technology LLC APPLICANT: Lutfiyya, Linda L
 APPLICANT:
 CURRENT FILING DATE:
 APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: METHODS OF USE THEREOF
 PRIOR APPLICATION NUMBER: 09/574,454 PRIOR FILING DATE: 2000-05-19
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SOFTWARE: PatentIn version 3.0
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 PCT-US00-07527-111
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CURRENT FILING DATE: 1999-10-05
NUMBER OF SEQ ID NOS: 3938
SOFTMARE: MS Word 97
 TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding TITLE OF INVENTION: Polypeptides Encoded Thereby FILE REFERENCE: 2750-0569F(PC)
 NUMBER OF SEQ ID NOS: 12360
SOFTWARE: Custom
 CURRENT APPLICATION NUMBER: PCT/US00/07527
CURRENT FILING DATE: 2000-03-22
EARLIER APPLICATION NUMBER: 607126,600
EARLIER FILING DATE: 1999-03-26
 EARLIER FILING DATE: 1999-171,550
 SOFTWARE: PatentIn
 NUMBER OF SEQ ID NOS: 138
 EARLIER APPLICATION NUMBER:
 APPLICANT: Human Genome Sciences,
 FILE REFERENCE: PS529PCT
 FEATURE: LOCATION 1..43, Ceres Seq. ID 1685642
OTHER INFORMATION: LOCATION 1..43)
OTHER INFORMATION: any Xaa - any amino acid, unknown or other
 ORGANISM: Homo sapiens
 TITLE OF INVENTION:
 ORGANISM: Arabidopsis thaliana
 TYPE: PRT
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4; Conservative
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 Application PC/TUS0007527
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LOCATION: (1)..(54)
OTHER INFORMATION: any Xaa = any amino acid, unknown or other
PCT-US99-22853B-41
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 PCT-US99-22853B-41
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APPLICANT: Ceres, Inc.
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 Application PC/TUS0007527
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 1999-10-05
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 PCT-US99-22853B-40
 Sequence 8508, Application US/09758472
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins,
 Sequence 5378, Appl1: GENERAL INFORMATION: APPLICANT: Lynn Dou
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SOFTWARE: MS WORD 97
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LENGTH: 79
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CURRENT FILING DATE: 2001-01-11
 CURRENT APPLICATION NUMBER: US/09/134,000A CURRENT FILING DATE: 1998-08-13
 APPLICANT: Lynn Doucette-Stamm et al TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ENTEROCOCCUS TITLE OF INVENTION: FAECALIS FOR DIAGNOSTICS AND THERAPEUTICS FILE REFERENCE: GTC-005
 TITLE OF INVENTION: Sequence-Determined DNI
TITLE OF INVENTION: Delypeptides Encoded TI
FILE REFERENCE: 2750-0569F(PC)
CURRENT APPLICATION NUMBER: PCT/US99/22853B
CURRENT FILING DATE: 1999-10-05
 PRIOR APPLICATION NUMBER: 60/179,065 PRIOR FILING DATE: 2000-01-31
 SOFTWARE: PatentIn Ver.
 PRIOR FILING DATE: 2000-02-04
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LOCATION: (1)..(79)
OTHER INFORMATION: any Xaa - any amino acid, unknown or other
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ORGANISM: Arabidopsis thaliana
 TYPE: PRT
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ORGANISM: Homo sapiens
 ORGANISM: Enterococcus faecalis
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 Application US/09134000A
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|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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#### RESULT 2 US-10-361-942-986 ; NAME/KEY: unsure ; LOCATION: (1)..(310); OTHER INFORMATION: unsure at all Xaa locations US-10-369-493-12686 RESULT 1 US-10-369-493-12686 GENERAL INFORMATION: APPLICANT: Cao, Yongwei APPLICANT: Hinkle, Gregory J. APPLICANT: Slater, Steven C. APPLICANT: Slater, Steven C. APPLICANT: Goldman, Barry S. APPLICANT: Goldman, Barry S. APPLICANT: Chen, Xianfeng TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES FILE REFERENCE: 38-10(52052)B Sequence 986, Application US/10361942 GENERAL INFORMATION: APPLICANT: Lutfilya, Linda L. TITLE OF INVENTION: Nucleic Acid Molecules And Other Molecules Associated With TITLE OF INVENTION: Transcription in Plants FILE REFERENCE: 38-21(15300)K FILE REFERENCE: 38-21(15300)K CURRENT APPLICATION NUMBER: US/10/361,942 CURRENT FILING DATE: 2003-02-10 PRIOR APPLICATION UNMBER: US 60/356,051 PRIOR FILING DATE: 2002-02-11 NUMBER OF SEQ ID NOS: 4.7374 SEQ ID NO 12686 LENGTH: 310 Matches Query Match Best Local : Sequence 12686, Application US/10369493 CURRENT APPLICATION NUMBER: US/10/369,493 CURRENT FILING DATE: 2003-02-28 PRIOR APPLICATION NUMBER: US 60/360,039 PRIOR FILING DATE: 2002-02-21 ORGANISM: Aspergillus nidulans TYPE: PRT FEATURE: Local 73 1 KKXXXXXXLD Similarity 40. 4; Conservative KKTTAAFALD 82 10 73.18; 0 Score 19; DB 6; L Pred. No. 1.7e+02; 0; Mismatches 6; Length 310; 0 Gaps 0

NUMBER OF SEQ ID NOS: 2906

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 US-09-134-000C-5378; Sequence 5378, Application US/09134000C; GENERAL INFORMATION:
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 ; OTHER INFORMATION: Clone ID: AT_T6A23.Cl.p24.tg US-10-361-942-986
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 US-09-134-000C-5378
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PRIOR FILING DATE: 1997-08-15
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 CURRENT APPLICATION NUMBER: US/09/134,000C CURRENT FILING DATE: 1998-08-13
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 ENGTH: 378
 Local Similarity 40.0 es 4; Conservative
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44 KKSRAFASLD 53
 44 KKSRAFASLD 53
 13 KKAADAAALD 22
 1 KKXXXXXXLD 10
 69.2%;
Similarity 40.0%;
4; Conservation
 1 KKXXXXXXLD 10
 Similarity
 KKXXXXXXLD 10
 Conservative
 73.1%;
 69.2%;
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 Score 18;
Pred. No.
 Score 18; DB 5;
Pred. No. 1e+02;
 Score 19;
Pred. No.
 Mismatches
 DB 6; Lc..
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 DB 5;
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 Length 87;
 Length 378;
 Length 87;
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 THERAPEUTICS
 Gaps
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US-09-724-676-55061
Sequence 55061, Application US/09724676
GENERAL IMPORMATION:
APPLICANT: Compugen LTD
TIPLE OF INVENTION: Variants of alternative splicing
 밁
 ; ORGANISM: Homo sapiens US-09-724-676-55061
 밁
 Q
 US-09-724-676A-55061
 RESULT 7
 US-10-421-684-1170
 RESULT 6
 US-10-421-684-1170
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Matches 4
 SEQ ID NO 1170
LENGTH: 100
 Sequence 55061, Application US/09724676A GENERAL INFORMATION:
 SOFTWARE: PatentIn version 3.2 SEQ ID NO 55061
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 Sequence 1170, Application US/10421684
APPLICANT: Compugen LTD TITLE OF INVENTION: Variants of alternative splicing FILE REFERENCE: 129181.4 Compugen CURRENT APPLICATION NUMBER: US/09/724,676A CURRENT FILING DATE: 2000-11-28
 FILE REFERENCE: 129181.4 Compugen CURRENT APPLICATION NUMBER: US/09, CURRENT FILING DATE: 2000-11-28
 PRIOR APPLICATION NUMBER: US 60/169,340 PRIOR FILING DATE: 1999-12-07 NUMBER OF SEQ ID NOS: 1753
 PRIOR APPLICATION NUMBER: US 60/169,513 PRIOR FILING DATE: 1999-12-07
 PRIOR APPLICATION NUMBER: US/09/732,210 PRIOR FILING DATE: 2000-12-07
 TITLE OF INVENTION: Anti-fungal Proteins and Methods for Their Use FILE REFERENCE: 38-21(15036)B CURRENT APPLICATION NUMBER: US/10/421,684 CURRENT FILING DATE: 2003-04-23
 NUMBER OF SEQ ID NOS: 97222
 APPLICANT:
 APPLICANT:
 APPLICANT: Bunkers, Greg J.
 TYPE: PRT
 ORGANISM: Marchantia polymorpha
 LENGTH: 109
 44
 29
 1 KKXXXXXXLD 10
 4;
 Similarity
 Similarity
4; Conserv
 KKSAAESMLD
 KKITETSSLD
 KKXXXXXXLD 10
 Mittanck, Cindy A. Seale, Jeffrey W.
 Wu, Yonnie S.
 Conservative
 53
 69.2%;
 69.2%;
40.0%;
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 Score 18;
Pred. No.
 Score 18; DB 6;
Pred. No. 1.2e+0;
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 Length 109;
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 <u>,</u>
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 Gaps
 Gaps
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 US-09-513-999C-6288
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US-09-513-999C-6288
 US-09-513-999C-6288
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 Matches
 Query Match
 SEQ ID NO 6288
 GENERAL INFORMATION
 Sequence 6288, Application US/09513999C
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 Query Match
 TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins FILE REFERENCE: 59.US2.REG CURRENT APPLICATION NUMBER: US/09/513,999C
 APPLICANT:
 CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/122,487
PRIOR FILING DATE: 1999-02-26
 SOFTWARE: Patent.pm
 PRIOR APPLICATION NUMBER: US 60/122,487 PRIOR FILING DATE: 1999-02-26
 CURRENT FILING DATE:
 APPLICANT: Dumas Milne Edwards, J.B.
 SOFTWARE: Patent.pm
 NUMBER OF SEQ ID NOS: 36681
 APPLICANT:
 SOFTWARE: PatentIn version EQ ID NO 55061
 NUMBER OF SEQ ID NOS:
 APPLICANT: Dumas Milne Edwards, J.B.
 ORGANISM: Homo sapiens
 PPLICANT: Giordano, J.Y.
ITLE OF INVENTION: Expressed Sequence Tags
ILE REFERENCE: 59.US2.REG
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 2000-02-24
 87
 36681
 69.28;
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 Score 18; DB 5; Le
Pred. No. 1.8e+02;
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US-09-724-676-55060
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US-09-949-016-6460
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 SOFTWARE: PatentIn Ver. 2.1
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 SOFTWARE: FastSEQ for Windows Version SEQ ID NO 6460
 APPLICANT: NADLER, STEVEN G.
APPLICANT: CARMAN, JULIE
TITLE OF INVENTION: POLYNUCLEOTIDES
TITLE OF INVENTION: NF-KB PATHWAY
APPLICANT: Compugen LTD TITLE OF INVENTION: Variants of alternative splicing FILE REFERENCE: 129181.4 Compugen CURRENT APPLICATION NUMBER: US/09/724,676 CURRENT FILING DATE: 2000-11-28
 CURRENT APPLICATION NUMBER: US/60/440,068
CURRENT FILING DATE: 2003-01-14
 PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
 APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOFFILE REFERENCE: CL001307
 NUMBER OF SEQ ID NOS: 746
 CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
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 114, Application US/60440068
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 Application US/09724676
 69.2%;
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US-09-724-676A-55060
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 US-10-282-122A-52371
 RESULT 13
US-09-724-676A-55060
 ; ORGANISM: Homo sapiens
US-09-724-676-55060
 PRIOR APPLICATION NUMBER: 60/191,078
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 60/206,848
PRIOR FILING DATE: 2000-05-23
PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 60/230,335
 SOFTWARE: PatentIn version SEQ ID NO 55060
 Sequence 55060, Application US/09724676A
GENERAL INFORMATION:
APPLICANT: Compugen LTD
TITLE OF INVENTION: Variants of alternative splicing
FILE REFERENCE: 129181.4 Compugen
CURRENT APPLICATION NUMBER: US/09/724,676A
CURRENT FILING DATE: 2000-11-28
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 NUMBER OF SEQ ID NOS: 97222
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 TITLE OF INVENTION: Identification of Essential Genes in Microorganisms FILE REFERENCE: ELITRA.034A CURRENT APPLICATION NUMBER: US/10/282,122A CURRENT FILING DATE: 2003-02-20
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 Ohlsen, Kari
Zyskind, Jud
 Yamamoto, Robert
 Carr, Grant
 Trawick, John
 Wall, Daniel
 Haselbeck, Robert
 Forsyth, R.
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Search completed: June 5, Job time: 33.4848 secs

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Matches 4
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LENGTH: 254
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CURRENT FILING DATE: 2003-05-06
 PRIOR APPLICATION NUMBER: US 60/088,701 PRIOR FILING DATE: 1998-06-09
 PRIOR APPLICATION NUMBER: US 09/328,352 PRIOR FILING DATE: 1999-06-04
 TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTE TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS FILE REFERENCE: PATH03-08
 APPLICANT: Breton, Gary L. APPLICANT: Bush, David
 Remaining Prior Application data removed - See File Wrapper or PALM. NORMEER OF SEQ ID NOS: 78614
 PRIOR FILING DATE: 2000-12-22
PRIOR APPLICATION NUMBER: 60/267,636
 PRIOR APPLICATION NUMBER: 60/253,625
PRIOR FILING DATE: 2000-11-27
 PRIOR APPLICATION NUMBER: 60/242,578
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 FILING DATE: 2001-02-16
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 APPLICATION NUMBER: 60/257,931
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 Similarity 4; Conserv
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 2001-02-09
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Title:
Perfect score:
Sequence:
 Result
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 Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
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 Minimum DB seq length: 0
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 Pred. No. 1s the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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 US-09-150-947F-15
 June 5, 2003, 15:29:17 ; Search time 123.182 Seconds (without alignments) 52.340 Million cell updates/sec
 1 XXXXXXXXX 10
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 GenCore version 5.1.6
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PCT-US00-08879-16

PCT-US00-08879-39

PCT-US00-08879-30

PCT-US00-08879a-16

PCT-US00-08879a-18
 ij
 SUMMARIES
 Compugen Ltd
 4569144
Sequence 13, Appl
Sequence 16, Appl
Sequence 18, Appl
Sequence 30, Appl
Sequence 16, Appl
Sequence 18, Appl
 Description
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|---------------------|---------------------|---------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------------|--------------------|---------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|-----------------|-------------------|-------------------|-------------------|--------------------|--------------------|---------------------|---------------------|-----------|---------------------|---------------------|
| <b>\$</b>           |                     | 40.     | 40.                 | 40.                 | 40.                 | 40.                 | 40.                 | 40.                 | 40.                 | 40.                | 40.                | 40.                 | 40.                | 40.                 | 40.                | 40.                | 40.                | 40.                | 40.                | 40.                | 40.                | 40.                | 40.               | 40.                | 40.                | 40.                | 40.                | 40.             | 40.               | 40.               | 40.               | 40.                | 40.                | 40.                 | 40.                 | 6 40.0    | 40.                 | 40.                 |
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| equence 2           | equence 32, Ap      | nce 20, | equence 18,         | equence 38, App     | uence 26, App       | equence 24, App     | uence 38, App       | quence 26, App      | equence 24, App     | e 38,              | equence 26,        | e 24, App           | e 72,              | e 85,               | ě<br>B             | 39,                | 33,                | 23,                |                    | 39,                | 33                 | 23,                | Sequence 15, Appl | 39,                | 33,                | App                | 15                 | B. Appl         | B. Appl           | Sequence 122, App |                   | δ                  | 85                 | 296, Ap             | equence 551, Ap     | e 152, Ap | equence 532, Ap     | equence 3           |

# ALIGNMENTS

|       |         |                                                                                                                                                         | :                                                    |                |                                                         |                               |                                 |                          |                                                                                                                     |                         |                      |                               | _        |
|-------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|----------------|---------------------------------------------------------|-------------------------------|---------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------|-------------------------------|----------|
|       |         |                                                                                                                                                         |                                                      | •              |                                                         |                               |                                 |                          |                                                                                                                     |                         |                      |                               |          |
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| 1 D 1 | 10 p 10 | Query Match 40.0%; Score 6; DB 1; Length 2; Best Local Similarity 100.0%; Pred. No. 4.2e+06; Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0; | TYPE: PRT<br>ORGANISM: Homo sapiens<br>USOO-00358-13 | 2              | NUMBER OF SEQ ID NOS: 25 SOFTWARE: Patentin version 3.0 | PRIOR FILING DATE: 1999-06-25 | CURRENT FILING DATE: 2000-01-07 | FILE REFERENCE: 00/20105 | TITLE OF INVENTION: FOLINGLECOIDES AND FOLIFEFILDES ENCODED THEREBY DISTANTLY HOM<br>TITLE OF INVENTION: HEPARANASE | APPLICANT: pecker, iris | GENERAL INFORMATION: | 13 Application DC/mircoOccase |          |
|       |         |                                                                                                                                                         |                                                      |                |                                                         |                               |                                 |                          | LX HOM                                                                                                              |                         |                      |                               |          |
|       |         |                                                                                                                                                         |                                                      |                |                                                         |                               |                                 |                          |                                                                                                                     |                         |                      |                               |          |

PCT-US00-08879-16

GENERAL INFORMATION:

Application PC/TUS0008879

APPLICANT:

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 PCT-US00-08879-18
 PCT-US00-08879-16
 CT-US00-08879-18
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 SOFTWARE:
SEQ ID NO 18
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CURRENT FILING DATE: 2000-04-04
 FILE REFERENCE: 4137-120 PO CURRENT APPLICATION NUMBER: CURRENT FILING DATE: 2000-
 SOFTWARE: 1
 APPLICANT: Borovski, Dov
TITLE OF INVENTION: Compositions and Methods for Controlling Pests
FILE REFERENCE: 4137-120 PCT
 NUMBER OF SEQ ID NOS:
 PRIOR FILING DATE:
 PRIOR APPLICATION NUMBER:
 APPLICANT: BOTOVSKI
 NUMBER OF SEQ ID NOS:
 PRIOR APPLICATION NUMBER: 09/
PRIOR FILING DATE: 1999-04-21
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OTHER INFORMATION: Description of Artificial Sequence: TMOF Analogue
 ORGANISM: Artificial Sequence
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 Local Similarity
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 REFERENCE:
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NCE: 4137-120 PCT
Borovski, Dov
VENTION: Compositions and Methods for Controlling Pests
NCE: 4137-120 PCT
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 Patentin Ver. 2.1
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Brandt, Alan
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 1999-04-21
 2000-04-04
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100.0%; Pred. No.
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 PCT/US00/08879
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CT-US00-08879A-18
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 10 D 10
 10 D 10
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 PatentIn Ver. 2.1
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 Patentïn Ver. 2.1
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 PCT-US00-08879A-30
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 Sequence 30, Application PC/TUS0008879A GENERAL INFORMATION:
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 PRIOR FILING DATE: 2001-09-12
NUMBER OF SEQ ID NOS: 1732
 CURRENT APPLICATION NUMBER: PCT/US02/09188
CURRENT FILING DATE: 2002-03-26
 CURRENT APPLICATION NUMBER: CURRENT FILING DATE: 2000-
 SOFTWARE: Pat
EQ ID NO 532
 PRIOR FILING DATE: 2001-0: PRIOR APPLICATION NUMBER:
 PRIOR FILING DATE:
 PRIOR APPLICATION NUMBER:
 FILE REFERENCE:
 NUMBER OF SEQ ID NOS: 50
 PRIOR APPLICATION NUMBER: 09/
PRIOR FILING DATE: 1999-04-21
 TITLE OF INVENTION: Human Secreted Proteins
 ORGANISM:
 OTHER INFORMATION: Description of Artificial Sequence: TMOF Analogue
 ORGANISM: Artificial Sequence
 FEATURE:
 ENGTH: 2
 ENGTH:
 Local
 Local Similarity
 APPLICATION NUMBER: US 09/950,083
 10 b 10
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 10 D 10
 1 D 1
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 Similarity
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 PatentIn Ver. 2.0
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 Homo sapiens
 Human Genome Sciences, Inc.
 D 10
 Application PC/TUS0209188
 Conservative
 Conservative
 Conservative
 NUMBER: US 60/278,650
2001-03-27
 2001-09-12
 2000-04-0
 100.0%;
 40.0%; Score 6; DB 1; Le
100.0%; Pred. No. 4.2e+06;
Live 0; Mismatches 0;
 100.0%;
 40.0%;
 us 09/950,082
 PCT/US00/08879A
 0
 Score 6; DB 1; Le
Pred. No. 4.2e+06;
 Score 6;
Pred. No.
 Mismatches
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 Length 2;
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 Indels
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 0;
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RESULT 9

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 ; ORGANISM: Homo sapiens PCT-US02-09370-551
 PCT-US02-09370-551
 RESULT 10
 CT-US02-09239-152
 PCT-US02-09239-152
 PCT-US02-23763-296
 RESULT 11
 Query Match
Best Local S
Matches 1
 Sequence 551, Applic GENERAL INFORMATION: APPLICANT: Human Ge
 Sequence 152, Applic GENERAL INFORMATION:
 Sequence 296, Application PC/TUS0223763 GENERAL INFORMATION:
 Query Match
Best Local 9
 SOFTWARE: Pa
SEQ ID NO 551
 SOFTWARE: Pa
SEQ ID NO 152
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 TITLE OF INVENTION: Human Secreted Proteins FILE REFERENCE: PS954PCT
 CURRENT APPLICATION NUMBER: PCT/US02/09239 CURRENT FILING DATE: 2002-03-26
CURRENT FILING DATE:
 APPLICANT: Sundaramoorthy, M.
 PRIOR APPLICATION NUMBER: US 09/950,083 PRIOR FILING DATE: 2001-09-12 NUMBER OF SEQ ID NOS: 1834
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 PRIOR APPLICATION NUMBER: US 60/278,650 PRIOR FILING DATE: 2001-03-27
CURRENT APPLICATION NUMBER: PCT/US02/23763
CURRENT FILING DATE: 2002-07-26
 APPLICANT: Hudson, B.
TITLE OF INVENTION: Crystallized structure of Type IV Collagen NC1 Domain Hexamer
 APPLICANT:
 PRIOR FILING DATE:
 PRIOR APPLICATION NUMBER: US 09/950,082
 PRIOR APPLICATION NUMBER: US 60/278,650 PRIOR FILING DATE: 2001-03-27
 NUMBER OF SEQ ID NOS: 380
 PRIOR APPLICATION NUMBER: US 09/950,083 PRIOR FILING DATE: 2001-09-12
 PRIOR FILING DATE:
 TITLE OF INVENTION: Human Secreted Proteins
 PRIOR APPLICATION NUMBER:
 REFERENCE:
 FILING DATE:
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 1 D 1
 1 D 1
 Similarity
1; Conserv
 Similarity
 PatentIn Ver. 2.0
 PatentIn Ver.
 Human Genome Sciences, Inc
 Application PC/TUS0209370
 Application PC/TUS0209239
 Conservative
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 Genome Sciences, Inc.
 2001-09-12
 2001-09-12
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 2002-03-
 40.0%; Score 6;
100.0%; Pred. No
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Length 2;

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; ORGANISM: Agrobacterium tumefaciens PCT-US99-26100-6
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PCT-US99-26100-6
 PCT-US02-30452-85
 ; ORGANISM: Homo sapiens
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LENGTH: 2
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Best Local
 SOFTWARE: Pat
SEQ ID NO 296
 SEQ ID NO 85
 Sequence 85, Application PC/TUS0230452 GENERAL INFORMATION:
 Query Match
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 CURRENT APPLICATION NUMBER: PCT/US99/26100 CURRENT FILING DATE: 1999-11-04
 APPLICANT: Ream, Walt et al.,
TITLE OF INVENTION: Plants Having Enhanced Gall Resistance
TITLE OF INVENTION: Methods and Compositions for Producing
FILE REFERENCE: 53629
 CURRENT APPLICATION NUMBER: PCT/US02/30452
CURRENT FILING DATE: 2002-09-26
PRIOR APPLICATION NUMBER: 60/324,528
PRIOR FILING DATE: 2001-09-26
NUMBER OF SEQ ID NOS: 131
SOFTWARE: Patentin version 3.1
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 EARLIER APPLICATION NUMBER: 60/107,185
 APPLICANT: Wyeth TITLE OF INVENTION: Antibody Inhibitors of GDF-8 and Uses Therefore REFERENCE: 08702.00012-00304
 PRIOR APPLICATION NUMBER: US 60/385,362 PRIOR FILING DATE: 2002-06-03 NUMBER OF SEQ ID NOS: 307
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TYPE: PRT
 PRIOR APPLICATION NUMBER: US 60/366,854 PRIOR FILING DATE: 2002-03-22
 ORGANISM: Homo sapiens
 Local Similarity
 APPLICATION NUMBER: US 60/308,523 FILING DATE: 2001-07-27
 APPLICATION NUMBER:
 10 D 10
 10 D 10
 2 D 2
 PatentIn Ver.
 PatentIn version 3.1
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 40.0%; Score 6; 1
100.0%; Pred. No.
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100.0%; Pred. N
 2.0
 -10-29
 os 60/351,289
 Mismatches
 Mismatches
 No.
 DB 1; Lo
 4.2e+06;
 Length 2;
 Length 2;
 0; Indels
 Resistance and Producing the Same
 Indels
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 0
 Gaps
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RESULT 15
US-08-222-626A-122
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 US-07-853-042A-3
 Sequence 122, Application US/08222626A GENERAL INFORMATION:
 Best Loc
Matches
 Query Match
 Matches
 Query Match
Best Local
 GENERAL INFORMATION:
 REGISTRATION NUMBER: 16825
REFERENCE/DOCKET NUMBER: PH
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703 684 1111
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
 APPLICANT: Arai, Naoko
APPLICANT: Masuda, Esteban S.
APPLICANT: Tokumitsu, Hiroshi
 APPLICATION NUMBER: US/O: FILING DATE: 19920318 CLASSIFICATION: 514 ATTORNEY/AGENT INFORMATION:
 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
 CORRESPONDENCE ADDRESS:
ADDRESSEE: DNAX Research Institute
 STRANDEDNESS: SI
TOPOLOGY: linear
MOLECULE TYPE: Pol
 SOFTWARE: DOS Text File CURRENT APPLICATION DATA:
 TITLE OF INVENTION: METHOD AND MEANS FOR INDUCING, RESP., TITLE OF INVENTION: PREVENTING CONSTRICTION OF THE PUPIL TITLE OF INVENTION: IN THE EYE
 TITLE OF INVENTION:
 CORRESPONDENCE ADDRESS
 NUMBER OF SEQUENCES:
 NUMBER OF SEQUENCES:
 APPLICANT:
 Local Similarity
 TYPE: AMINO ACID
 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
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 STREET:
 COUNTRY:
 ADDRESSEE:
 ENGTH:
 10 D 10
 10 D 10
 22314
 Similarity
 .
D
1
 FRED PHILPITT
Palo Alto
 U
 Application US/07853042A
 Virginia
 901 California Avenue
 99 Canal Center Plaza, Ste. 300
 USA
 Anders BILL
 Conservative
 FRED PHILPITT
 Floppy disk
 Polypeptide
 single
 PURIFIED COMPONENTS OF MAMMALIAN TRANSCRIPTION REGULATION COMPLEXES, AND ANALOGS
 40.0%; Score 6; DB 3; Length 2; 100.0%; Pred. No. 4.2e+06; Indel
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TELEPAX: 415-496-1200

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SEQUENCE CHARACTERISTICS:
LENGTH: 2 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
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APPLICATION NUMBER: US/08/222,626A
FILING DATE: 04-APR-1994
CLASSIFICATION: 424
PRIOR APPLICATION: 424
PRIOR APPLICATION UDATA:
APPLICATION UDMER: US 08/148,061
FILING DATE: 05-NOV-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/113,971
FILING DATE: 30-AUG-1993
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APPLICATION NUMBER: US 08/088,998
FILING DATE: 30-JUI-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/088,483
FILING DATE: 06-JUI-1993
PRIOR APPLICATION NUMBER: US 08/088,483
FILING DATE: 06-JUI-1993
ATTORNEY/AGENT INFORMATION:
NAME: Ching, Edwin P:
REGISTRATION NUMBER: J4,090
REFERENCE/DOCKET NUMBER: DX0392K3
TELLECOMMUNICATION INFORMATION:
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TELECOMMUNICATION INFORMATION:
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 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
 COUNTRY: USA
ZIP: 94304-1104
COMPUTER READABLE FORM:
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Search completed: June 5, 2003, 15:47:37 Job time: 124.182 secs

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Title: Perfect score: Sequence:

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protein

Scoring table:

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11, Appl

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Maximum Match 100%
Listing first 45 s
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and is derived by
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 Description
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RESULT
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 ; molecule Type: peptide; sequence Description; sequence Description; subscription; style="text-align: center;">
5EQUENCE DESCRIPTION; subscription; subscri
 RESULT 1
US-08-472-679H-15
; Sequence 15, Application;
; GENERAL INFORMATION;
 Query Match
Best Local Similarity
 Matches
 INFORMATION FOR SEQ ID NO: 15:
 APPLICANT: Cochran, Mark D.

Junker, David E.

TITLE OF INVENTION: Recombinant Swinepox Virus NUMBER OF SEQUENCES: 267

CORRESPONDENCE ADDRESS:

ADDRESSE: Pamela G. Salkeld
STREET: 2000 Galloping Hill Road
CITY: Kenilworth
STATE: New Jersey
COUNTRY: USA
ZIP: 07033
 FILING DATE: 07-Jun-1995
CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Salkeld, Pamela G.
REGISTRATION NUMBER: 38,607
TELECOMMUNICATION INFORMATION:
TELEPHONE: (908) 298-2135
 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/472,679H
EILING DATE: 07-Jun-1995
 COMPUTER READABLE FORM:
MEDIUM TWPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
 SEQUENCE CHARACTERISTICS:
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 TYPE: amino acid
 TELEFAX: (908)
 LENGTH: 2 amino acids
 Application US/08472679H
 Conservative
 40.0%;
 298-5388
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 US-09-853-080A-37

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US-09-773-830-11

US-09-953-830-11

US-09-964-045-11

US-09-967-847A-30

US-09-980-347-6

US-09-980-347-61

US-09-939-481-81

US-09-939-481-1053

US-09-623-548A-1054

US-09-623-548A-1150

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US-09-623-548A-1170

US-09-623-548A-1170

US-09-623-548A-1170
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Pred. No.
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 .6e+05;
 Version
 0;
 Length 2;
 #1.25
 Indels
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US-08-472-679H-33
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 US-08-472-679H-23
 Sequence 33, Application US/08472679H GENERAL INFORMATION:
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 Sequence 23, Application GENERAL INFORMATION
 Query Match
 TELEFAX: (908) 298-5388
INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
LENGTH: 2 amino acids
 COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/472,679H
FILING DATE: 07-Jun-1995
CLASSIFICATION: <Unknown>
 CORRESPONDENCE ADDRESS:
ADDRESSEE: Pamela G. Salkeld
STREET: 2000 Galloping Hill Road
 COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
 ATTORNEY/AGENT INFORMATION: NAME: Salkeld, Pamela G.
 NAME: Salkeld, Pamela G.
REGISTRATION NUMBER: 38,607
TELECOMMUNICATION INFORMATION
TELEPHONE: (908) 298-2135
 CLASSIFICATION: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Salkeld, Pamela G.
 TITLE OF INVENTION: Recombinant Swinepox Virus NUMBER OF SEQUENCES: 267
 APPLICANT: Cochran, Mark D.
Junker, David E.
 MOLECULE TYPE: peptid
 CORRESPONDENCE ADDRESS:
 TITLE OF INVENTION: Recombinant Swinepox Virus
 APPLICANT: Cochran, Mark D.
Junker, David E.
 NUMBER OF SEQUENCES:
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 1 D 1
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 Similarity
 CITY: Kenilworth
STATE: New Jersey
 STATE: New Jersey
 COUNTRY: USA
ZIP: 07033
 TYPE: amino acid
 APPLICATION NUMBER: US/08/472,679H
FILING DATE: 07-Jun-1995
 CITY: Kenilworth
 STREET:
 ADDRESSEE: Pamela G. Salkeld
 Application US/08472679H
 40.0%;
ilarity 100.0%;
Conservative
 2000 Galloping Hill Road
 Score 6; DB 4
b; Pred. No. 7.6
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 DB 4; Ler
c. 7.6e+05;
 Length 2;
 Indels
 0,
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 0
 ; TOPOLOGY: linear; MOLECULE TYPE: peptide SEQUENCE DESCRIPTION: SUS-08-472-679H-39
 RESULT 5
US-08-472-679H-15
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 S
 ; MOLECULE TYPE: peptide; SEQUENCE DESCRIPTION: SEQ ID NO: 33: US-08-472-679H-33
 RESULT 4
US-08-472-679H-39
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; Sequence 15, Application US/08472679H
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 INFORMATION FOR SEQ ID NO:
 INFORMATION FOR SEQ ID NO: 33:
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 NAME: Salkeld, Pamela G.
REGISTRATION NUMBER: 38,607
TELECOMMUNICATION INFORMATION:
 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOSTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA:
 ZIP: 07033
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
 APPLICATION NUMBER: US/08,
FILING DATE: 07-Jun-1995
CLASSIFICATION: <UNKnown>
ATTORNEY/AGENT INFORMATION:
 REGISTRATION NUMBER: 38,607
TELECOMMUNICATION INFORMATION:
TELEPHONE: (908) 298-2135
 SEQUENCE CHARACTERISTICS:
 CORRESPONDENCE ADDRESS:
ADDRESSEE: Pamela
 NUMBER OF SEQUENCES:
 TITLE OF INVENTION: Recombinant Swinepox Virus
 APPLICANT: Cochran, Mark D. Junker, David E.
 SEQUENCE CHARACTERISTICS:
 10 D 10
 10 D 10
 1 D 1
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 TYPE: amino acids
 TELEFAX:
 TELEPHONE:
 STATE: New Jersey
 CITY: Kenilworth
 ADDRESSEE: Pamela G. Salkeld
STREET: 2000 Galloping Hill Road
 TELEFAX: (908)
 COUNTRY:
 Application US/08472679H
 ENGTH: 2 amino acids
 40..0%; So illarity 100.0%; F Conservative 0;
 Conservative
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 (908)
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 100.0%; P
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 298-5388
 298-5388
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 %; Score 6; DB 4
%; Pred. No. 7.6
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 b; Score 6; DB 4
b; Pred. No. 7.6
0; Mismatches
 US/08/472,679H
 ID NO:
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o. 7.6e+05
 Version #1.25
 Length
 Length 2;
 Indels
 Indels
 0,
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 Gaps
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 US-08-472-679H-23; Sequence 23, Application US/08472679H; GENERAL INFORMATION:
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 TELEFAX: (908) 298-5
INFORMATION FOR SEQ ID NO: 15:
 GENERAL INFORMATION:
 Local Similarity
 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/472,679H
FILING DATE: 07-Jun-1995
CLASSIFICATION: <UNknown>
 ATTORNEY/AGENT INFORMATION:
NAME: Salkeld, Pamela G.
REGISTRATION NUMBER: 38,607
 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/472,679H
FILING DATE: 07-Jun-1995
CLASSIFICATION: <Unknown>
 CORRESPONDENCE ADDRESS:
ADDRESSEE: Pamela G. Salkeld
STREET: 2000 Galloping Hill Road
 ATTORNEY/AGENT INFORMATION:
NAME: Salkeld, Pamela G.
REGISTRATION NUMBER: 38,607
TELECOMMUNICATION INFORMATION:
TELEPHONE: (908) 298-2135
 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
 TITLE OF INVENTION: Recombinant Swinepox Virus NUMBER OF SEQUENCES: 267
 APPLICANT: Cochran, Mark D.
Junker, David E.
 SEQUENCE CHARACTERISTICS:
 CORRESPONDENCE ADDRESS:
ADDRESSEE: Pamela
 NUMBER OF SEQUENCES:
TELECOMMUNICATION INFORMATION:
 TITLE OF INVENTION: Recombinant Swinepox Virus
 APPLICANT: Cochran,
 10 D 10
 1 D 1
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 CITY: Kenilworth
STATE: New Jersey
 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
 CITY: Kenilworth
STATE: New Jersey
 ZIP: 07033
 STREET: 2000 Galloping Hill Road
 ZIP: 07033
 COUNTRY: USA
 LENGTH: 2 amino acids
 Conservative
 USA
 40.0%; Pr
100.0%; Pr
 Pamela G. Salkeld
 n, Mark D.
, David E.
 298-5388
 Score 6; 1
Pred. No.
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 Length 2;
 Indels
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APPLICANT: Cochran, Mark D.
 TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

SEQUENCE DESCRIPTION: SEQ ID NO: 23:
US-08-472-679H-23
 TOPOLOGY: linear

MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 33:
US-08-472-679H-33
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 US-08-472-679H-33
 Sequence 33, Application US/08472679H GENERAL INFORMATION:
 Query Match
Best Local :
 Query Match
Best Local Similarity
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 TELEFAX: (908) 298-5
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LENGTH: 2 amino acids
 Local Similarity
nes 1; Conserv
 APPLICATION NUMBER: US/08/472,679H
FILING DATE: 07-Jun-1995
CLASSIFICATION: <UNKnown>
ATTORNEY/AGENT INFORMATION:
NAME: Salkeld, Pamela G.
 REGISTRATION NUMBER: 38,607 TELECOMMUNICATION INFORMATION:
 SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
 CORRESPONDENCE ADDRESS:
 TITLE OF INVENTION: Recombinant Swinepox Virus NUMBER OF SEQUENCES: 267
 APPLICANT: Cochran, Mark D.
 10 D 10
 10 D 10
 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
 TYPE: amino acid
 COUNTRY: USA
 CITY: Kenilworth
 TELEPHONE: (908) 298-2135
TELEFAX: (908) 298-5388
 STATE: New Jersey
 TELEPHONE: (908)
TELEFAX: (908) 2
 ADDRESSEE: Pamela G. Salkeld
 Conservative
 Conservative
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 2000 Galloping Hill Road
 100.0%; Fr
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 Gaps
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TITLE OF INVENTION: Recombinant Swinepox Virus NUMBER OF SEQUENCES: 267

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 ; ORGANISM: Agrobacterium tumefaciens
US-10-187-339-6
 US-10-187-339-6
 Query Match
Best Local Similarity
 SEQ ID NO 6
LENGTH: 2
 Sequence 6, Application US/10187339 GENERAL INFORMATION:
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 CURRENT APPLICATION NUMBER: US/10/187,339
CURRENT FILING DATE: 2002-06-28
PRIOR APPLICATION NUMBER: US/09/434,837
PRIOR FILING DATE: 1999-11-04
 APPLICANT: Ream, Walt et al.,
TITLE OF INVENTION: Plants Having Enhanced Gall Resistance and.
TITLE OF INVENTION: Methods and Compositions for Producing the Same
 PRIOR FILING DATE: 1998-11-05
NUMBER OF SEQ ID NOS: 12
 SOFTWARE: PatentIn Ver.
 PRIOR APPLICATION NUMBER: 60/107,185
 FILE REFERENCE: 53629
 TYPE: PRT
 INFORMATION FOR SEQ ID NO: 39: SEQUENCE CHARACTERISTICS:
 APPLICATION NUMBER: US/08/472,679H
FILING DATE: 07-Jun-1995
CLASSIFICATION: CUNKNOWN>
ATTORNEY/AGENT INFORMATION:
NAME: Salkeld, Pamela G
REGISTRATION NUMBER: 38,607
TELEPHONE: (908) 298-2135
 Local Similarity 100 tes 1; Conservative
 TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 39:
 COMPUTER READABLE FORM:
MEDIDM TYPE: Floppy disk
COMPUTER: IBM PC compatible
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OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
 CORRESPONDENCE ADDRESS:
 10 D 10
 10 D 10
 1 D 1
 STATE: New Jersey
 TYPE: amino acid
 COUNTRY: USA
 CITY: Kenilworth
 LENGTH: 2 amino acids
 STREET: 2000 Galloping Hill Road
 TELEPHONE: (908)
 ADDRESSEE: Pamela G. Salkeld
 Conservative
 40.0%; Score 6; DB 4; Le
100.0%; Pred. No. 7.6e+05;
tive 0; Mismatches 0;
 40.0%; Score 6; I
100.0%; Pred. No.
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 ; ORGANISM: Homo sapiens US-10-405-027-5115
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 US-10-405-027-5115
 US-10-109-048-461
 US-10-109-048-461
 Sequence 5115, Application US/10405027
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Human Secreted Proteins
FILE REFERENCE: PS806P1
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 SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 461
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 GENERAL INFORMATION:
 CURRENT APPLICATION NUMBER: US/10/405,027
CURRENT FILING DATE: 2003-04-07
PRIOR APPLICATION NUMBER: 60/369,608
PRIOR FILING DATE: 2002-04-04
 PRIOR APPLICATION NUMBER: 60/376,175 PRIOR FILING DATE: 2002-04-30
 PRIOR FILING DATE: 2001-03-30 NUMBER OF SEQ ID NOS: 1154
 PRIOR APPLICATION NUMBER: 60/279,720 PRIOR FILING DATE: 2001-03-30
 FILE REFERENCE: 2461-76
CURRENT APPLICATION NUMBER: US/10/109,048
CURRENT FILING DATE: 2003-03-04
 NUMBER OF SEQ ID NOS: 5810
 TITLE OF INVENTION: GLUCAN CHAIN LENGTH DOMAINS
 APPLICANT:
 APPLICANT
 APPLICANT: COMMURI, PADMA
 OTHER INFORMATION: Description of Unknown Organism: Accession No.
 ORGANISM: Unknown Organism FEATURE:
 LENGTH:
 Local Similarity
 10
 10 D 10
 1 D 1
 1; Conservative
 D 10
 D 2
 KEELING, PETER I
RAMIREZ, NONA
MCKEAN, ANGELA
 GUAN, HANPING
 Application US/10109048
 40.0%; Score 6; ilarity 100.0%; Pred. N Conservative 0; Misma
 ZHONG
 40.0%; Score 6; DB 6; L
100.0%; Pred. No. 7.6e+05
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 DB 6; Le
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 Length
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Sequence 15, Application PC/TUS0214358 GENERAL INFORMATION:

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APPLICANT: XENCOR APPLICANT: SYNGEN APPLICANT: Briggs

Briggs, Steven P.

SYNGENTA PARTICIPATIONS AG

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RESULT 14
PCT-USO2-14358-17
; Sequence 17, Application PC/TUS0214358
; GENERAL INFORMATION:
 밁
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 Q
 PCT-US02-14358-16
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PCT-US02-14358-15
 PCT-US02-14358-16
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Best Local
 SOFTWARE: POSEQ ID NO 15
 GENERAL INFORMATION:
 SEQ ID NO 16
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 APPLICANT: Muchhal, Umesh
TITLE OF INVENTION: Nucleic Acids and Proteins with Thioredoxin Reductase Activity
FILE REFERENCE: FP-71457-2-PC/RFT/RMS/RMK
CURRENT APPLICATION NUMBER: PCT/US02/14358
CURRENT FILING DATE: 2002-11-25
PRIOR APPLICATION NUMBER: US 60/370,609
PRIOR APPLICATION NUMBER: US 60/370,609
PRIOR FILING DATE: 2002-04-05
PRIOR APPLICATION NUMBER: US 60/389,029
PRIOR APPLICATION NUMBER: US 60/289,029
PRIOR FILING DATE: 2001-05-04
 APPLICANT: Muchhal, Umesh
TITLE OF INVENTION: Nucleic Acids and Proteins with Thioredoxin Reductase Activity
FILE REFERENCE: FP-71457-2--PC/RFT/RMX/RMX
CURRENT APPLICATION NUMBER: PC70502/14358
CURRENT FILING DATE: 2002-11-25
CURRENT FILING DATE: 2002-11-25
 LENGTH: 3
TYPE: PRT
 PRIOR FILING DATE: 20(
NUMBER OF SEQ ID NOS:
 PRIOR APPLICATION NUMBER: US 60/370,609 PRIOR FILING DATE: 2002-04-05
 APPLICANT:
 NUMBER OF SEQ ID NOS: 208
 PPLICANT:
 ORGANISM: Bacillus subtillis
 PPLICANT:
 Local Similarity
 Local Similarity les 1; Conserv
 APPLICATION NUMBER: US 60/289,029
 10 D 10
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 PatentIn version 3.1
 D 1
 PatentIn version 3.1
 D 1
 Application PC/TUS0214358
 Heifetz, Peter
Luginbuhl, Pet
 Desjarlais, John R.
 Briggs, Steven P. Dalmia, Bipin K.
 SYNGENTA PARTICIPATIONS AG
 Desjarlais,
 Conservative
 2001-05-04
 Greg
 40.0%;
100.0%;
 Peter
 40.0%;
 Peter
 John R.
 Score 6; Pred. No
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Pred. N
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 Query Match
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 SOFTWARE: PE
 Best Local Similarity 100.0%;
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 SEQ ID NO 17
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 APPLICANT: Heifetz, Peter
APPLICANT: Luginbuhl, Peter
APPLICANT: Muchhal, Umesh
TITLE OF INVENTION: Nucleic Acids and Proteins with Thioredoxin Reductase Activity
FILE REFERENCE: FP-71457-2-PC/RFT/RMS/RWX
CURRENT APPLICATION NUMBER: PCT/USO2/14358
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CURRENT FILING DATE: 2002-11-25
 PRIOR APPLICATION NUMBER: US 60/370,609
PRIOR FILING DATE: 2002-04-05
PRIOR APPLICATION NUMBER: US 60/289,029
PRIOR FILING DATE: 2001-05-04
 CURRENT APPLICATION NUMBER: PCT/US02/14358 CURRENT FILING DATE: 2002-11-25
 APPLICANT: Heifetz, Peter
APPLICANT: Luginbuhl, Peter
APPLICANT: Luginbuhl, Umesh
APPLICANT: Muchhal, Umesh
TITLE OF INVENTION: Nucleic Acids and Proteins with Thioredoxin Reductase Activity
FILE REFERENCE: FP-71457-2-PC/RFT/RMK/RMK
 PRIOR APPLICATION NUMBER: US 60/370,609
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PRIOR FILING DATE: 2001-05-04
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 APPLICANT:
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 SOFTWARE: PatentIn version 3.1
 APPLICANT:
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 APPLICANT:
 ORGANISM: Sarccharomyces cerevisiae
 PPLICANT:
 ENGTH:
 10 D 10
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 Similarity
 Briggs, Steven P
Dalmia, Bipin K.
del Val, Greg
 Desjarlais,
 Briggs, Steven P.
Dalmia, Bipin K.
 SYNGENTA PARTICIPATIONS
 Application PC/TUS0214358
 Desjarlais,
 SYNGENTA PARTICIPATIONS AG
 DATE: 2001-05-04
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Search completed: June 5, 2003, 15:52:27

Job time : 29.4848 secs

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 Post-processing: Minimum Match 0%
Maximum Match 100%
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length: 2000000000
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 4569144 seqs, 644733110 residues
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 US-09-869-136-9

US-09-791-537-103693

US-09-791-537-103701

US-09-791-537-103704

US-09-791-537-103705
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 SUMMARIES
 4569144
 Description
Sequence
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103693,
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| ģ               | US-09-708-008B-     |       | . 7 | 9  | 23   | 37 |
| 32,             | US-09-555-115A-3    | _     | . 7 | 9  | 23   | 36 |
| 31,             | US-09-555-115A      |       | . 7 | 9  | 23   | 35 |
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| w               | US-09-791-537-12625 | N     | . 7 | Ν  | 24   | 31 |
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| w               | US-09-791-537-4167  | N     | .7  | Ν  | 24   | 29 |
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| 88724           | US-09-791-537-8872  | N     | . 7 | N  | 24   | 25 |
| 86827,          | us-09-791-537-8682  | N     | . 7 | Ν  | 24   | 24 |
| 10              | US-09-869-136-2     | N     | . 7 | N  | 24   | 23 |
| 85735,          | US-09-791-537-857   | N     | . 7 | N  | 24   | 22 |
| 137418          | US-09-791-537-13741 | ผ     | . 7 | N  | 24   | 21 |
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| 103712          | -09-791-537-103     | 09 21 | . 7 | 72 | 24   | 9  |
| 103708          | -09-791-537-10370   | N     | . 7 |    | 24   | œ  |
| 10370           | 9-791-537-10370     | N     | .7  |    | 24   | 7  |

# ALIGNMENTS

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LENGTH: 204
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; ORGANISM: Streptococcus pyogenes
US-09-869-136-9
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 US-09-869-136-9
 Sequence 9, Application US/09869136
GENERAL INFORMATION:
APPLICANT: FRASER, JOHN DAVID
APPLICANT: PROFT, THOMAS
 Query Match
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 PRIOR FILING DATE: 1998-12-24
NUMBER OF SEQ ID NOS: 19
SOFTWARE: Patentin Ver. 2.1
 CURRENT FILING DATE: 2001-07-20 PRIOR APPLICATION NUMBER: PCT/NZ99/00228 PRIOR FILING DATE: 1999-12-24
 FILE REFERENCE:
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 TITLE OF INVENTION: SUPERANTIGENS FILE REFERENCE: 3911-8
 PRIOR APPLICATION NUMBER: NZ 333589
123 KTTVTAQEID 132
 APPLICATION NUMBER: US/09/869,136
 3 KXXXTXQEXD 12
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5; Conserv
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 Score 24; I
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 US-09-791-537-103701
 US-09-791-537-103695
 ; ORGANISM: Streptococcus pyogenes US-09-791-537-103695
 ; ORGANISM: Streptococcus pyogenes
 US-09-791-537-103693
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SOFTWARE: PatentIn version 3.0
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 Sequence 103695, Application US/09791537 GENERAL INFORMATION:
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 APPLICANT: Bionomix, Inc.
 Sequence 103693, Application US/09791537
 Best Local Similarity
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 FILE REFERENCE: 261/210
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
 CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
 APPLICANT: Danzer, Joseph TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBITITLE OF INVENTION: METHODS OF USE THEREOF FILE REFERENCE: 261/210
 APPLICANT:
 CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
 APPLICANT:
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 APPLICANT: Bionomix, Inc.
 NUMBER OF SEQ ID NOS: 153055
 APPLICANT: Danzer, Joseph
TITLE OF INVENTION: METHODS OF USE THEREOF
 PPLICANT: DARRET, JOSEPH
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBI
TITLE OF INVENTION: METHODS OF USE THEREOF
TILE REFERENCE: 261/210
 Local Similarity hes 5; Conserv
 125
 125 KTTVTAQEID 134
 3 KXXXTXQEXD 12
 3 KXXXTXQEXD 12
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 Debe, Derek
 Debe, Derek
 Debe, Derek
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Pred. No.
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 DB 21;
 DB 21;
 .1e+02
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 Length 209;
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 RESULT 6
US-09-791-537-103705
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 US-09-791-537-103704
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LENGTH: 209
TYPE: PRT
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GENERAL INFORMATION
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 TYPE: PRT
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 125 KTTVTAQEID 134
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 ; ORGANISM: Streptococcus pyogenes US-09-791-537-103701
 Query Match
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Matches 5; Conserv
 SOFTWARE: PatentIn version SEQ ID NO 103701
 APPLICANT: Debe, Derek
APPLICANT: Danzer, JOSeph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
 NUMBER OF SEQ ID NOS: 153055
 CURRENT APPLICATION NUMBER: US/09/791,537
 APPLICANT: Bionomix, Inc.
 SOFTWARE: PatentIn version 3.0
 NUMBER OF SEQ ID NOS: 153055
 CURRENT FILING DATE:
 CURRENT APPLICATION NUMBER: US/09/791,537
 APPLICANT: DANZER, JOSEPH
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY ME
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
 125 KTTVTAQEID 134
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 103705, Application US/09791537
3 KXXXTXQEXD 12
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5; Conserv
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 Length 209;
 Length 209
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 US-09-791-537-103712; Ap
 ; ORGANISM: Streptococcus pyogenes US-09-791-537-103708
 us-09-791-537-103708
 ; ORGANISM: Streptococcus pyogenes US-09-791-537-103706
 US-09-791-537-103706
 SOFTWARE: PatentIn version 3.0 SEQ ID NO 103708 LENGTH: 209
 APPLICANT: Bionomix, Inc.
 SEQ ID NO 103706
LENGTH: 209
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 APPLICANT: Debe, Derek
APPLICANT: Denzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY I
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
 CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
 APPLICANT: Debe, Derek
APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THEEE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: METHODS OF USE THEREOF
 CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
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SOFTWARE: PatentIn version 3.0
 APPLICANT: Bionomix, Inc. APPLICANT: Debe, Derek
 NUMBER OF SEQ ID NOS: 153055
 FILE REFERENCE: 261/210
 APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: METHODS OF USE THEREOF
 APPLICANT: Bionomix, Inc.
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Local Similarity 50.0%;
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US-09-791-537-103717
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US-09-791-537-103712
 US-09-791-537-103717
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CURRENT FILING DATE: 2001-02-22
NUMBER OF SEQ ID NOS: 153055
SOFTWARE: Patentin version 3.0
 APPLICANT: Danzer, Joseph
TITLE OF INVENTION: TEREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY ME
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
 APPLICANT: Bionomix, Inc.
APPLICANT: Debe, Derek
APPLICANT: Danzer, Josep
 APPLICANT:
 APPLICANT: Bionomix, Inc.
 ENGTH:
 Local Similarity
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 125
125 KTTVTAQEID 134
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 3 KXXXTXQEXD 12
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 Application
 Application US/09791537
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US-09-791-537-103729
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US-09-791-537-103720
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SEQ ID NO 103719
LENGTH: 209
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SOFTWARE:
 APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
 NUMBER OF SEQ ID NOS: 153055
 CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
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 TYPE: PRT
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Debe, Derek
 Danzer, Joseph
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Search completed: June Job time: 147.818 secs

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US-09-791-537-103733
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 APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY ME
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 NUMBER OF SEQ ID NOS: 153055
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Maximum Match 100%
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US-09-675-784A-1175

US-10-172-425B-37

US-09-134-000C-6190

US-09-134-000C-6190

US-09-134-000C-1990

US-10-203-536-1

US-10-203-536-1

US-10-424-599-179861

US-10-424-599-179861

US-10-424-599-179861

US-10-424-599-179861

US-10-424-599-179861

US-10-424-599-47F-3

US-10-172-425B-3

US-10-172-425B-3

US-10-172-425B-1

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US-10-172-425B-2

US-10-172-425
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|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------------------|-------------------|------------------|-------------------|------------------|
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| 66.7             | 66.7              | 66.7              | 66.7              | 66.7              | 66.7              | 66.7              | .66.7             | 66.7              | 66.7              | 66.7              | 66.7              | 66.7              | 66.7              | 66.7               | 66.7              | 66.7             | 66.7              | 66.7             |
| 24               | 16                | 14                | 14                | 14                | 14                | 14                | 14                | 14                | 14                | 14                | 14                | 14                | 14                | .14                | 14                | 14               | 13                | 13               |
| u                | σ                 | 6                 | σ                 | σ                 | σ                 | σ                 | σ                 | 9                 | σ                 | 6                 | 6                 | σ                 | σ                 | 6                  | տ                 | 5                | σ                 | 6                |
| US-09-150-947F-7 | US-10-172-425B-14 | US-10-172-425B-50 | US-10-172-425B-47 | US-10-172-425B-46 | US-10-172-425B-45 | US-10-172-425B-44 | US-10-172-425B-42 | US-10-172-425B-36 | US-10-172-425B-27 | US-10-172-425B-26 | US-10-172-425B-15 | US-10-172-425B-13 | US-10-172-425B-10 | US-10-172-425B-9 · | US-09-150-947F-10 | US-09-150-947F-9 | US-10-172-425B-11 | US-10-172-425B-6 |
| Sequence 7       | Sequence 1        | Sequence 5        | Sequence 4        | Sequence 3        | Sequence 2        | Sequence 2        | Sequence 1        | Sequence 1        | Sequence 1        | Sequence 9         | Sequence 1        | Sequence 9       | Sequence 1        | Sequence 6       |
|                  | 4                 | 50,               | 7,                | 6                 | ÿ                 | 44,               | 42,               | 36,               | 27,               | 26,               | 15,               | 13,               | 10,               |                    | 10,               | -                | ļ,                | 6,               |
| Appli            | App1              | Appl              | Appl              | App1              | Appl              | Appl              | Appl              | Appl              | App1              | Appl              | App1              | Appl              | Appl              | Appli              | Appl              | Appli            | Appl              | Appli            |

#### ALIGNMENTS

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 RESULT 1
 US-09-675-784A-11175
 Query Match
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Matches 5
 SEQ ID NO 33
LENGTH: 14
 Sequence 33, Application US/10172425B
GENERAL INFORMATION:
APPLICANT: Kaempfer, Raymond
APPLICANT: Arad, Gila
 GENERAL INFORMATION:
 Sequence 11175,
 CURRENT APPLICATION NUMBER: US/10/172,425B CURRENT FILING DATE: 2002-06-13 PRIOR APPLICATION NUMBER: 09/150,947 PRIOR FILING DATE: 1998-09-10 PRIOR APPLICATION NUMBER: PCT/IL97/00438 PRIOR FILING DATE: 1997-12-30 PRIOR APPLICATION NUMBER: ISRAEL 119938 PRIOR FILING DATE: 1996-12-30
 APPLICANT: HARE, ROBERTA S.
APPLICANT: SHAW, KAREN J.
APPLICANT: SHIMER JR., GEO
APPLICANT: KESSLER, MARCO
APPLICANT: NOLLING, JORK
 APPLICANT: ZENG, QIANDONG
APPLICANT: GREENE, JONATHAN R.
TITLE OF INVENTION: ASPERGILLUS FUMIGATUS NUCLEIC
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: 2976-4020US1
 TITLE OF INVENTION: BROAD SPECTRUM ANTAGONISTS AND VACCINES TITLE OF INVENTION: DIRECTED AGAINST PYROGENIC EXOTOXINS FILE REFERENCE: A31967-PCT-USA-A-A 056031.0164
 NUMBER OF SEQ ID NOS: 57
SOFTWARE: FastSEQ for Windows Version 4.0
CURRENT APPLICATION NUMBER: US/09/675,784A
 ORGANISM: Streptococcus pyogenes
 TYPE: PRT
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 Similarity
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 KXXXTXQEXD 12
 KTTVTAQEID
 SHAW, KAREN J.
SHIMER JR., GEORGE
 Conservative
 Application US/09675784A
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Pred. No. 4.9
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 ; ORGANISM: Staphylococcus aureus US-10-172-425B-37
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 Query Match
Best Local Similarity
"~+~hes 5; Conservi
 US-09-134-000C-6190
 ; ORGANISM: Aspergillus fumigatus US-09-675-784A-11175
 Sequence 6190, Application US/09134000C GENERAL INFORMATION:
APPLICANT: Lynn Doucette-Stamm et al
 SOFTWARE: PatentIn version 3.1 SEQ ID NO 6190
 SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 37
LENGTH: 14
TYPE: PRT
 Query Match
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 Sequence 37, Application US/10172425B GENERAL INFORMATION:
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-09-134-000C-6190
 CURRENT APPLICATION NUMBER: US/09/134,000C CURRENT FILING DATE: 1998-08-13 PRIOR APPLICATION NUMBER: US 60/055,778 PRIOR FILING DATE: 1997-08-15 NUMBER OF SEQ ID NOS: 6812
 TITLE OF INVENTION: BROAD SPECTRUM ANTAGONISTS AND VACCINES TITLE OF INVENTION: DIRECTED AGAINST PYROCEMIC EXOTOXINS FILE REFERENCE: A31967-07-USA-A-A 066031.0164 CURRENT APPLICATION NUMBER: US/10/172,425B CURRENT FILING DATE: 2002-06-13 PRIOR APPLICATION NUMBER: 09/150,947 PRIOR FILING DATE: 1998-09-10 PRIOR APPLICATION NUMBER: PCT/IL97/00438 PRIOR APPLICATION NUMBER: SCT/IL97/00438 PRIOR APPLICATION NUMBER: STRAEL 119938 PRIOR FILING DATE: 1997-12-30 PRIOR FILING DATE: 1997-12-30 PRIOR FILING DATE: 1996-12-30 APPLICANT: Lynn Doucette-Stamm et al TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO TITLE OF INVENTION: ENTERCOCCCUS FAECALIS FOR DIAGNOSTICS AND THERAPEUTICS FILE REFERENCE: 032796-032
 PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 1999-09-29
NUMBER OF SEQ ID NOS: 13925
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 APPLICANT: Kaempfer, Raymond
APPLICANT: Arad, Gila
 ORGANISM: Enterococcus faecalis
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 Score 23; I
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RESULT 7
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 RESULT 5
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 APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
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 TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO TITLE OF INVENTION: ENTEROCOCCUS FAECALIS FOR DIAGNOSTICS AND THERAPEUTICS EILE REFERENCE: 032796-032

CURRENT APPLICATION NUMBER: US/09/134,000C

CURRENT FILING DATE: 1998-08-13

PRIOR APPLICATION NUMBER: US 60/055,778

PRIOR FILING DATE: 1997-08-15
 APPLICANT:
 APPLICANT:
 APPLICANT: La Rosa Thomas
 NUMBER OF SEQ ID NOS: 6812
 ORGANISM: Glycine max FEATURE:
 LENGTH: 134
TYPE: PRT
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 TYPE: PRT
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 21
 85 KKFSTSQEVD
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 3 KXXXTXQEXD 12
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5; Conserv
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 La Rosa Thomas J
Kovalic David K
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 Application US/10424599
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 US-10-424-599-179861
 US-09-751-708A-12
 US-10-203-536-1
 RESULT 9
 ORGANISM: Staphylococcus aureus US-09-751-708A-12
 Sequence 12, Application US/09751708A GENERAL INFORMATION: APPLICANT: TERMAN, David S
 GENERAL INFORMATION:
 SEQ ID NO 12
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PRIOR FILING DATE: 2000-10-31
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PRIOR FILING DATE: 2000-02-17
NUMBER OF SEQ ID NOS: 6
 CURRENT APPLICATION NUMBER: US/09/751,708A
CURRENT FILING DATE: 2002-10-15
PRIOR APPLICATION NUMBER: US 60/173,371
PRIOR FILING DATE: 1999-12-28
 APPLICANT: Cao Yongwei
TITLE OF INVENTION: Solvente and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)B
 APPLICANT: La ROSa Thomas J
APPLICANT: Kovalic David K
APPLICANT: Zhou Yihua
 NUMBER OF SEQ ID NOS: 166
SOFTWARE: PatentIn version 3.1
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 TITLE OF INVENTION: Staphylococcal Enterotoxin SEC-SER, Expression Vector and Host Control of Invention: Production Method Thereof, and Manufacturing Method of Vaccine File Reference: 0808-0329P
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 APPLICANT: CARMAN, JULIE
TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES ASSOCIATED WITH THE
TITLE OF INVENTION: NF-KB PATHWAY
FILE REFERENCE: 3053-4191
CURRENT APPLICATION NUMBER: US/60/440,068
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 APPLICANT: NADLER, STEVEN G. APPLICANT: CARMAN, JULIE
 NUMBER OF SEQ ID NOS: 8252
 FILE REFERENCE: PATH03-08
 TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTE TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
 APPLICANT: Breton, Gary APPLICANT: Bush, David
 TYPE: PRT
 TYPE: PRT
 ORGANISM: Glycine max
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les 5; Conserv
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 3 KXXXTXQEXD 12
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 Application US/10431652
 Gary L.
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50.0%;
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 US-09-150-947F-4
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 Sequence 3. Application US/10172425B
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APPLICANT: Kaempfer, Raymond
APPLICANT: Arad, Gila
 SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4
LENGTH: 10
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 SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 3
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CURRENT FILING DATE: 1998-09-10
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PRIOR FILING DATE: 1996-12-30
 APPLICANT: Kaempfer, APPLICANT: Arad, Gil
 PRIOR APPLICATION NUMBER: ISRAEL 119938 PRIOR FILING DATE: 1996-12-30
 NUMBER OF SEQ ID NOS: 18
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 APPLICANT: Arad, Gila
 LENGTH: 10
TYPE: PRT
ORGANISM: Staphylococcus aureus
 APPLICANT: Kaempfer, Raymond
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Kaempfer, Raymond
Arad, Gila
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 Raymond
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50.0%;
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 Score
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 Score 22;
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 Mismatches
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Search completed: June Job time: 34.1818 secs

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2003, 15:52:27

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US-10-172-425B-4
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SEQ ID NO 4
LENGTH: 10
TYPE: PRT
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 PRIOR APPLICATION NUMBER: 09/150,947
PRIOR FILING DATE: 1998-09-10
PRIOR APPLICATION NUMBER: PCT/IL97/00438
PRIOR FILING DATE: 1997-12-30
PRIOR FILING DATE: 1996-12-30
PRIOR FILING DATE: 1996-12-30
 APPLICANT: Kaempfer, Raymond APPLICANT: Arad, Gila
 TITLE OF INVENTION: BROAD SPECTRUM ANTAGONISTS AND VACCINES TITLE OF INVENTION: DIRECTED AGAINST PYROGENIC EXOTOXINS FILE REFERENCE: A31967-PCT-USA-A-A 066031.0164 CURRENT APPLICATION NUMBER: US/10/172,425B CURRENT FILING DATE: 2002-06-13
 PRIOR APPLICATION NUMBER: PCT/IL97/00438
PRIOR FILING DATE: 1997-12-30
PRIOR APPLICATION NUMBER: ISRAEL 119938
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 Title:
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 Total number of hits satisfying chosen parameters:
 OM protein - protein search, using sw model
 Maximum
 Minimum
 Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
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US-09-816-660-16924
US-09-513-996A-43459
US-09-708-427-18784
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Sequence 16924, A
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|-----------------|------------------|-----------------|-----------------|---------------|------------|-----------------|-------------|---------------|-------|---------------|---------------|---------------|------------------|---------------|------------------|---------------|---------------|--------------|------------------|-----------------|------------------|------------------|------------------|-----------------|----------------|--------------|--------------|------------------|----------------|-----------------|----------------|-----------|----------------|-----------------|----------|----------------|--------------------|
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| 64.3            | م<br>م<br>د<br>د | •               | •               | 64.3          | •          |                 | ٠.          | ٠.            | ٠     | 64.3          | ٠.            | ٠             |                  | ٠.            |                  | 64.3          |               | 64.3         |                  |                 | ٠.               | ٠.               | ٠.               |                 | ٠.             | ٠.           |              |                  | •              |                 | ٠.             |           |                | •               |          | 64.3           | 7.                 |
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| æ               | 4 6              | 9 2             | L<br>W          |               |            | 27              | 27          | 27            | 27    | 25            | 22            |               |                  | 21            | 21               | 19            | 19            | 19           | 20               | 27              | 16               | 21               | 20               | 27              | 21             | 21           | 19           | 26               | 21             |                 |                |           |                |                 |          | 26             | 27                 |
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| quence 18, Appl | 91,              | equence 32, App | equence 32, App | equence 91, A | 218, Ap    | equence 2179,   | e 2179,     | e 655,        | a     | equence 495,  |               | ce 495,       | 50628,           | equence 2066  | nce 20661,       | equence 12,   | æ             | equence 4,   | 424              | e 25982,        | equence 25982,   | 46061,           | 4242             | 1170,           | equence 23478, | equence 1170 | equence 13,  | equence 85       | equence 8508,  | 5378,           | •              | 41, 2     | 112,           | equence 111,    | e 42, Ap | 1006           | 2815,              |

#### ALIGNMENTS

RESULT 1 US-60-360-039-12686

GENERAL INFORMATION:

Application US/60360039

APPLICANT: Cao, Yongwei

; NAME/KEY: unsure ; LOCATION: (1)..(310) ; OTHER INFORMATION: un US-60-360-039-12686 CURRENT APPLICATION NUMBER: US/60/360,039
CURRENT FILING DATE: 2002-02-21
NUMBER OF SEQ ID NOS: 47374
SEQ ID NO 12686
LENGTH: 310
TYPE: PRT
ORGANISM: Aspergillus nidulans
FEATURE: Query Match Best Local Similarity Matches APPLICANT: Chen, Xianfeng
APPLICANT: Goldman, Barry S.
APPLICANT: Hinkle, Gregory J.
APPLICANT: Slater, Steven C.
APPLICANT: Slater, Steven C.
TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES
FILE REFERENCE: 38-10(52052)A 4; Conservative unsure at all Xaa locations 67.98; 0; Score 19; DB 27; Pred. No. 2.4e+03; Mismatches Length 310; Indels 0 Gaps 0;

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LENGTH: 358
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PRIOR APPLICATION NUMBER: US 09/733,089
PRIOR FILING DATE: 2000-12-11
 PRIOR APPLICATION NUMBER: US 09/474,435
PRIOR FILING DATE: 1999-12-28
PRIOR APPLICATION NUMBER: US 09/654,617
PRIOR FILING DATE: 2000-09-05
 PRIOR APPLICATION NUMBER: US 09/620,392 PRIOR FILING DATE: 2000-07-19
 CURRENT APPLICATION NUMBER: US/09/816,660 CURRENT FILING DATE: 2001-03-26
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PRIOR FILING DATE: 1999-12-28
 FILE REFERENCE: 38-21(15300)D
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CURRENT FILING DATE: 2000-12-11
 TITLE OF INVENTION: Nucleic Acid Molecules And Other Molecules Associated With ITLE OF INVENTION: Transcription In Plants
 NUMBER OF SEQ ID
 ORGANISM: Arabidopsis thaliana
 PPLICANT:
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 TILE OF INVENTION: Transcription In Plants LE REFERENCE: 38-21(15300)D
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 INFORMATION
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 Dotson, Stanton
 KKAADAAALD 51
 Dotson, Stanton B.
 Lutfiyya, Linda L. McIninch, James
 Kovalic,
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 Lutfiyya, Linda L.
 Kovalic,
 Conservative
 Application US/09816660
 Application US/09733089
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 Transcription In Plants
 67.98;
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 Score 19; I
Pred. No. 2
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 DB 21; Length 358;
 .8e+03;
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 밁
 US-09-513-996A-43459
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 SEQ ID NO 18784
 Sequence 18784, Application US/09708427 GENERAL INFORMATION:
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 SEQ ID NO 43459
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 Sequence 43459, Application US/09513996A GENERAL INFORMATION:
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 CURRENT APPLICATION NUMBER: US/09/708,427
CURRENT FILING DATE: 2000-11-09
 TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTID TITLE OF INVENTION: ENCODED THEREBY
 SOFTWARE: PatentIn version 3.1
 NUMBER OF SEQ ID NOS: 85364
 CURRENT APPLICATION NUMBER: US/09/513,996A CURRENT FILING DATE: 2000-02-25
 FILE REFERENCE: 2750-1243P
 TITLE OF INVENTION: SEQUENCE-DETERMINED DNA FRAGMENTS AND CORRESPONDING POLYPEPTID TITLE OF INVENTION: THEREBY
 APPLICANT: N. ALEXANDROV et al.
 NUMBER OF SEQ ID NOS: 81028
 APPLICANT: N. ALEXANDROV et al.
 NAME/KEY: misc_feature LOCATION: 1..378
 ORGANISM: Arabidopsis thaliana
 NAME/KEY: UNSURE LOCATION: 1..378
 OTHER INFORMATION: Ceres Seq. ID 1834815
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Gaps
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 US-10-221-279-10068
 ; ORGANISM: Arabidopsis thaliana US-60-356-051-2815
 US-60-356-051-2815
 US-09-791-537-114720
 US-09-791-537-114720
 Sequence 10068, Application US/10221279
GENERAL INFORMATION:
APPLICANT: Hyseq, Inc
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 SEQ ID NO 114720
 GENERAL INFORMATION:
 Sequence 114720, Application US/09791537
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 TITLE OF INVENTION: Novel Nucleic Acids and Polypeptides FILE REFERENCE: 21272-046
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CURRENT APPLICATION NUMBER: US/10/221,279
CURRENT FILING DATE: 2002-09-06
PRIOR APPLICATION NUMBER: 09/574,454
PRIOR FILING DATE: 2000-05-19
 CURRENT APPLICATION NUMBER: US/60/356,051
CURRENT FILING DATE: 2002-02-11
NUMBER OF SEQ ID NOS: 2926
 APPLICANT: Danzer, Joseph
TITLE OF INVENTION: THREE DIMENSIONAL STRUCTURES OF PROTEIN FAMILIES AND FAMILY MEMBE
TITLE OF INVENTION: METHODS OF USE THEREOF
FILE REFERENCE: 261/210
CURRENT APPLICATION NUMBER: US/09/791,537
CURRENT FILING DATE: 2001-02-22
 APPLICANT: Monsanto Technology LLC APPLICANT: Lutfiyya, Linda L
 APPLICANT: Debe, Derek
APPLICANT: Danzer, Jos
 APPLICANT: Bionomix, Inc.
 NUMBER OF SEQ ID NOS: 153055
 TYPE: PRT
 ORGANISM: Arabidopsis thaliana
 PPLICANT: Lutflyys, Linds L
ITLE OF INVENTION: NUCLEIC ACIDS AND OTHER MOLECULES ASSOCIATED WITH
ITLE OF INVENTION: TRANSCRIPTION IN PLANTS
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 ENGTH:
 ENGTH:
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 Local Similarity
APPLICATION NUMBER: 09/519,705 FILING DATE: 2000-03-07
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 13 KKAADAAALD 22
 378
 3 KKXXXXXXLD 12
 PatentIn version 3.0
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US-10-221-279-10068
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CURRENT FILING DATE: 2000-03-22
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 APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: 47 Human Secreted Proteins
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OTHER INFORMATION: any xaa - any amino acid, unknown or other
 ORGANISM: Arabidopsis thaliana
 TYPE: PRT
 OTHER INFORMATION: LOCATION 1..43,
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 Score 18; DB
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Matches

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PCT-US00-07527-112

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 Query Match
Best Local Similarity
"atches 4; Conserva
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 PCT-US99-22853B-41
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 PCT-US99-22853B-41
 SOFTWARE: M
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LENGTH: 54
TYPE: PRT
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APPLICANT: Ceres, Inc.
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 Sequence 41, Application PC/TUS9922853B GENERAL INFORMATION:
 SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 112
 GENERAL INFORMATION:
APPLICANT: Human Genome Sciences, Inc.
TITLE OF INVENTION: 47 Human Secreted Proteins
FILE REFERENCE: PS529PCT
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CURRENT FILING DATE: 1999-1
NUMBER OF SEQ ID NOS: 3938
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US-09-758-472-8508
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CURRENT FILING DATE: 1998-08-13
NUMBER OF SEQ ID NOS: 6810
SEQ ID NO 5378
LENGTH: 87
 Sequence 5378, Application US/09134000A
GENERAL INFORMATION:
APPLICANT: Lynn Doucette-Stamm et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ENTEROCCCCUS
TITLE OF INVENTION: FAECALIS FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: GTC-005
 Sequence 8508, Application US/09758472
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins,
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LENGTH: 89
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 SOFTWARE: 1
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CURRENT FILING DATE: 2001-01-11
PRIOR APPLICATION NUMBER: 60/179,065
 FILE REFERENCE: 2750-0569F(PC)
CURRENT APPLICATION NUMBER: PCT/US99/22853B
CURRENT FILING DATE: 1999-10-05
NUMBER OF SEQ ID NOS: 3938
 PRIOR APPLICATION NUMBER: 60/180,628 PRIOR FILING DATE: 2000-02-04
 PRIOR FILING DATE: 2000-02-04
NUMBER OF SEQ ID NOS: 9632
 PRIOR FILING DATE:
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 SOFTWARE: PatentIn Ver.
 FILE REFERENCE: PHOO1
ORGANISM: Homo sapiens FEATURE:
 TYPE: PRT
 FEATURE:
OTHER INFORMATION: LOCATION 1..79,
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 ORGANISM: Arabidopsis thaliana
 TYPE: PRT
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 41 KKLTTTDALD
 3 KKXXXXXXLD 12
 3 KKXXXXXXLD
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 MS Word 97
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Pred. No.
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 Length 79
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NAME/KEY: SITE
LOCATION: (3)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
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LOCATION: (4)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
NAME/KEY: SITE
NAME/KEY: SITE
NAME/KEY: SITE
COCATION: (18)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-758-472-8508

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Matches 4; Conservative 0; Mismatches 6; Indels 0; Gaps 0;

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 US-10-369-493-12686

US-10-361-942-986

US-09-134-0000-5378

US-09-134-0000-5378

US-10-421-684-1170
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US-09-724-676A-55061
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92, Appl
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GENERAL INFORMATION:
APPLICANT: Lutfiyya, Linda L.
TITLE OF INVENTION: Nucleic Acid Molecules And Other Molecules Associated With
TITLE OF INVENTION: Transcription in Plants
FILE REFERENCE: 38-21(15300)K
 CURRENT APPLICATION NUMBER: US/10/369,493
CURRENT FILING DATE: 2003-02-28
PRIOR APPLICATION NUMBER: US 60/360,039
PRIOR FILING DATE: 2002-02-21
NUMBER OF SEQ ID NOS: 47374
SEQ ID NO 12686
LENGTH: 310
 GENERAL INFORMATION:
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 APPLICANT: Cao, Yongwei APPLICANT: Hinkle, Gregory J. APPLICANT: Slater, Steven C. APPLICANT: Goldman, Barry S. APPLICANT: Chen, Xianfeng
 TITLE OF INVENTION: EXPRESSION OF MICROBIAL PROTEINS IN PLANTS FOR PRODUCTION OF TITLE OF INVENTION: PLANTS WITH IMPROVED PROPERTIES FILE REFERENCE: 38-10(52052)B
 CURRENT APPLICATION NUMBER: US/10/361,942 CURRENT FILING DATE: 2003-02-10 PRIOR APPLICATION NUMBER: US 60/356,051 PRIOR FILING DATE: 2002-02-11
NUMBER OF
 ORGANISM: Aspergillus
 TYPE: PRT
 FEATURE:
 73 KKTTAAFALD
 3 KKXXXXXXLD 12
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 Similarity
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 Application US/10369493
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 Score 19; DB 6;
Pred. No. 1.7e+02;
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 Indels
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 Gaps
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Sequence 5378, Application US/09134000C
GENERAL INFORMATION:
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 δÃ
 ; ORGANISM: Enterococcus faecalis US-09-134-000C-5378
 US-09-134-000C-5378
 US-10-361-942-986
 US-09-134-000C-5378
 Sequence 5378, Application US/09134000C
GENERAL INFORMATION:
APPLICANT: Lynn Doucette-Stamm et al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
TITLE OF INVENTION: ENTEROCOCCUS FABCALIS FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 032796-032
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LENGTH: 87
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 NUMBER OF SEQ ID NOS: 6812
 APPLICANT: Lynn Doucette-Stamm et al
 OTHER INFORMATION: Clone ID: AT_T6A23.C1.p24.tg
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 ORGANISM: Enterococcus faecalis
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APPLICANT: Compugen LTD
TITLE OF INVENTION: variants of alternative splicing
 SOFTWARE: PatentIn version 3.2
SEQ ID NO 55061
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CURRENT FILING DATE: 2000-11-28
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 APPLICANT:
 APPLICANT: Bunkers, Greg J.
 TITLE OF INVENTION: Anti-fungal Proteins and Methods for Their Use
 APPLICANT:
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 ORGANISM: Marchantia polymorpha
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FILE REFERENCE: 129181.4 Compugen CURRENT APPLICATION NUMBER: US/09/724,676A CURRENT FILING DATE: 2000-11-28

NUMBER OF SEQ ID

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 US-09-513-999C-6288
 US-09-513-999C-6288
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 ; ORGANISM: Homo sapiens
US-09-724-676A-55061
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 CURRENT APPLICATION NUMBER: US/09/513,999C CURRENT FILING DATE: 2000-02-24
 APPLICANT: Duclert, A. APPLICANT: Giordano, J
 NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patent.pm
 PRIOR APPLICATION NUMBER: US 60/122,487 PRIOR FILING DATE: 1999-02-26
 TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins FILE REFERENCE: 59.US2.REG
 APPLICANT: Dumas Milne Edwards, J.B.
 NUMBER OF SEQ ID NOS: 36681
 APPLICANT: Duclert, A. APPLICANT: Giordano, J
 APPLICANT: Dumas Milne Edwards, J.B.
 ORGANISM: Homo sapiens
 TYPE: PRT
 LENGTH: 147
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 Sequence 114, Applic GENERAL INFORMATION:
 SOFTWARE: FastSEQ
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 SOFTWARE: PatentIn Ver. SEQ ID NO 114
 APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
 APPLICANT: Compugen LTD TITLE OF INVENTION: Variants of alternative splicing FILE REFERENCE: 129181.4 Compugen CURRENT APPLICATION NUMBER: US/09/724,676
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CURRENT FILING DATE: 2000-04-14
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PRIOR FILING DATE: 2000-10-20
 PRIOR EPPLICATION NUMBER: 60/PRIOR FILING DATE: 2000-10-03
 CURRENT FILING DATE:
 FILE REFERENCE: 3053-4191
CURRENT APPLICATION NUMBER: US/60/440,068
 APPLICANT: CARMAN, JULIE
TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES ASSOCIATED WITH THE
TITLE OF INVENTION: NF-KB PATHWAY
 APPLICANT: NADLER, STEVEN G. APPLICANT: CARMAN, JULIE
CURRENT FILING DATE:
 NUMBER OF SEQ ID NOS: 746
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PatentIn version 3.2

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 SOFTWARE: PatentIn version 3.2
SEQ ID NO 55060
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 TYPE: PRT
ORGANISM: Homo sapiens
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NUMBER OF SEQ ID NOS: 97222
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TITLE OF INVENTION: Variants of alternative splicing
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 PRIOR APPLICATION NUMBER: 60/206,848
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PRIOR APPLICATION NUMBER: 60/207,727
PRIOR FILING DATE: 2000-05-26
 PRIOR APPLICATION NUMBER: 60/191,078 PRIOR FILING DATE: 2000-03-21
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 Carr, Grant
 Trawick, John
 Zyskind, Judith
 Ohlsen, Kari
 Zamudio, Carro
Malone, Cheryl
 Forsyth, R.
 Yamamoto, Robert
 Haselbeck, Robert
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 Application US/10282122A
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 Daniel
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US-10-431-652-7651
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PRIOR APPLICATION NUMBER: US 09/328,352
 NUMBER OF SEQ ID NOS: 8252
 PRIOR FILING DATE: 1999-06-04
PRIOR APPLICATION NUMBER: US 60/088,701
 TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTE TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
 PRIOR FILING DATE: 1998-06-09
 APPLICANT: Breton,
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 PRIOR APPLICATION NUMBER: 60/242,578
 TYPE: PRT
 APPLICATION NUMBER: 60/257,931
FILING DATE: 2000-12-22
APPLICATION NUMBER: 60/267,636
 FILING DATE:
 APPLICATION NUMBER: 60/269,308
 APPLICATION NUMBER: 60/253,625 FILING DATE: 2000-11-27
 FILING DATE: 2001-02-16
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 GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd
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| w            | w                 | w             | w        | w             | w      | ω        | w          | w              | w          | w          | ω              | w             | w                 | ω              | u             | ω              | ω              | ω           | w              | ω           | ω              | w              | ω             | -<br>ω         | w               | 6<br>ω       | ω              | ω            | w             | w              | ω            | ω          | w            | ū              | ω              | ω               | w                  | w          |
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|              |                   |               |          |               |        | Ø        |            |                |            |            | æ              |               |                   |                |               |                |                | Sequence 2: |                | •••         | ,-             | æ              | o .           | O              | æ               | Sequence 23  |                |              |               | O              | æ            |            |              |                | "              | Sequence 15     | æ                  | Sequence 3 |
| •            | •                 | •             | •        | •             | , App  | •        | , App      | •              | 24, Appl   | •          | •              | 24, Appl      | ,                 |                | 85, Appl      | -              | •              | 3, Appl     | •              | •           | •              | •              | •             | •              | App             | App          | 5. Appl        |              | Appli         | 22, App        | Appli        | Appli      | 5, Appl      | 96, App        | ,              | 'n              | ν,<br>Α            | 0, Appl    |

## ALIGNMENTS

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| Overy Match 35.3%; Score 6; DB 1; Length 2; Best Local Similarity 100.0%; Pred: No. 4.2e+06; Matches 1; Conservative 0; Mismatches 0; Indels 0; Gaps 0; Oy 12 D 12 Db 1 D 1 | SEQ ID NO 13 ; LENGTH: 2 ; TYPE: PRT ; ORGANISM: Homo sapiens PCT-US00-00358-13 | GENERAL INFORMATION:  APPLICANT: Pecker, iris  ITITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES ENCODED THEREBY DISTANTLY  ITITLE OF INVENTION: HEPARANASE  FILE REFERENCE: 00/20105  CURRENT APPLICATION NUMBER: PCT/US00/00358  CURRENT FILING DATE: 2000-01-07  PRIOR APPLICATION NUMBER: 60/140,801  PRIOR FILING DATE: 1999-06-25  NUMBER OF SEQ ID NOS: 25  NUMBER OF SEQ ID NOS: 25 | RESULT 1 PCT-US00-00358-13 ; Sequence 13, Application PC/TUS0000358 |
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PRIOR FILING DATE: 1999-04-21
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 PLICANT: Borovsk1, Dov
TLE OF INVENTION: Compositions and Methods for Controlling Pests
LE REFERENCE: 4137-120 PCT
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CANT: Borovski, Dov
OF INVENTION: Compositions and Methods for Controlling Pests
REFERENCE: 4137-120 PCT
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PRIOR FILING DATE: 2001-09-12
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PRIOR FILING DATE: 2001-09-12
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APPLICANT: Hudson, B.
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APPLICANT: Human Genome Sciences, Inc.
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APPLICANT: Hudson, B.
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APPLICATION NUMBER: US 60/308,523 FILING DATE: 2001-07-27 APPLICATION NUMBER: US 60/351,289

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 2001-09-26
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 Arai, Naoko
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PCT-US02-21322-6

PCT-US02-21322A-6

PCT-US02-26918A-316

PCT-US02-26918A-317

PCT-US02-26918A-319

PCT-US02-26918A-319
 US-10-109-048-461
US-10-405-027-5115
PCT-US02-14358-15
PCT-US02-14358-16
PCT-US02-14358-17
 US-08-472-679H-15
US-08-472-679H-23
US-08-472-679H-39
US-08-472-679H-39
US-08-472-679H-215
US-08-472-679H-31
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 SUMMARIES
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187-339-6
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 33, Appl
39, Appl
6, Appli
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5115, Ap
 15, Appl
16, Appl
17, Appl
18, Appl
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RESULT
 Query Match
Best Local
 Matches
 12 D 12
 1 D 1
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| w                | ω                | ω                   | ω                   | ω                   | ω                   | ω                 | ω                | w                 | ω               | ω                 | ω                | ω                 | w                | ω                | ω                 | ω                | w                 | ω                 |
| Q                | 6                | G                   | u                   | ū                   | u                   | ū                 | G                | u                 | σ               | G                 | S                | u                 | տ                | S                | 5                 | ū                | տ                 | ۲                 |
| US-10-141-531-16 | US-10-141-531-15 | US-09-623-548A-1170 | US-09-623-548A-1160 | US-09-623-548A-1054 | US-09-623-548A-1053 | US-09-898-165B-33 | US-09-939-481-81 | US-09-723-437B-11 | US-09-980-347-6 | US-09-867-847A-30 | US-09-564-045-11 | US-09-992-124B-74 | US-09-573-830-11 | US-09-772-819-11 | US-09-853-080A-37 | US-09-716-394-11 | US-09-302-195C-1  | PCT-US03-14096-24 |
|                  |                  |                     |                     |                     |                     |                   |                  |                   |                 |                   |                  |                   |                  |                  |                   |                  |                   |                   |
| 16,              |                  | e 1170,             | Sequence 1160, Ap   | Sequence 1054, Ap   | e 1053              | æ                 | 81,              | 11,               | 6,2             | 30,               |                  | 74,               | 11,              | 11,              | e 37,             | 11,              | Sequence 1, Appl1 | Sequence 24, Appl |

## ALIGNMENTS

```
RESULT 1

US-08-472-679H-15

US-08-472-679H-15

; Sequence 15, Application US/084/20,...
; GENERAL INFORMATION:
; APPLICANT: Cochran, Mark D.
; TITLE OF INVENTION: Recombinant Swinepox Virus
; NUMBER OF SEQUENCES: 267
; CORRESPONDENCE ADDRESS:
ADDRESSEE: Pamela G. Salkeld
ADDRESSEE: Pamela G. Salkeld
 ; MOLECULE TYPE: peptide
; SEQUENCE DESCRIPTION: SEQ
US-08-472-679H-15
 INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
 COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Vers
SOFTWARE: Patentin Release #1.0, Vers
CURRENT APPLICATION UMBER: US/08/472,679H
FILING DATE: 07-Jun-1995
CLASSIFICATION: UNFORMATION:
NAME: Salkeld, Pamela G.
 REGISTRATION NUMBER: 38,607
TELECOMMUNICATION INFORMATION:
TELEPHONE: (908) 298-2135
 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
 TYPE: amino acid
TOPOLOGY: linear
 STATE: New Jersey COUNTRY: USA
 TELEPHONE: (908)
 LENGTH: 2 amino acids
 Conservative
 35.3%;
 298-5388
 %; Score 6; DB 4
%; Pred. No. 7.6
0; Mismatches
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 15:
 DB 4; Length 2;
5. 7.6e+05;
ches 0; Indel
 Version #1.25
 Indels
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Gaps
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밁
 ; MOLECULE TYPE: peptide ; SEQUENCE DESCRIPTION: SEQ ID NO: 23: US-08-472-679H-23
 US-08-472-679H-23
 RESULT 3
 US-08-472-679H-33
 Sequence 33, Application US/08472679H GENERAL INFORMATION:
 Sequence 23, Application US/08472679H GENERAL INFORMATION:
 Matches
 Query Match
 TELEFAX: (908) 298-1
INFORMATION FOR SEQ ID NO: 23
SEQUENCE CHARACTERISTICS
 CORRESPONDENCE ADDRESS:
ADDRESSEE: Pamela G. Salkeld
STREET: 2000 Galloping Hill Road
 NAME: Salkeld, Pamela G.
REGISTRATION NUMBER: 38,607
TELECOMMUNICATION INFORMATION:
TELEPHONE: (908) 298-2135
 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/472,679H
FILING DATE: 07-Jun-1995
CLASSIFICATION: <Unknown>
 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
 TITLE OF INVENTION: Recombinant Swinepox Virus NUMBER OF SEQUENCES: 267
 APPLICANT: Cochran, Mark D.
Junker, David E.
 ATTORNEY/AGENT INFORMATION:
 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
 TITLE OF INVENTION: Recombinant Swinepox Virus NUMBER OF SEQUENCES: 267
ATTORNEY/AGENT INFORMATION:
NAME: Salkeld, Pamela G.
 CORRESPONDENCE ADDRESS:
 APPLICANT: Cochran,
 12 D 12
 1 D 1
 1;
 Similarity
 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
 COUNTRY: USA
ZIP: 07033
 STATE: New Jersey
 CITY: Kenilworth
 APPLICATION NUMBER: US/08/472,679H
FILING DATE: 07-Jun-1995
CLASSIFICATION: <Unknown>
 STATE: New Jersey
 CITY: Kenilworth
 STREET:
 TOPOLOGY: linear
 LENGTH: 2 amino acids
 ADDRESSEE: Pamela G. Salkeld
STREET: 2000 Galloping Hill Road
 Conservative
 07033
 amino acid
 Cochran, Mark D.
Junker, David E.
 35.3%; JC
100.0%; Pr
0;
 298-5388
 score 6; DB 4
b; Pred. No. 7.6
0; Mismatches
 DB 4; 10, No. 7.6e+05; 0;
 Length 2;
 Indels
 Gaps
 0;
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 ; MOLECULE TYPE: peptide
; SEQUENCE DESCRIPTION: SEQ ID NO:
US-08-472-679H-39
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 Sequence 39, Applicati
GENERAL INFORMATION:
 Matches
 Query Match
Best Local Similarity
 Query Match
 TELEPHONE: (908) 298
TELEFAX: (908) 298-5
INFORMATION FOR SEQ ID NO: 39:
 INFORMATION FOR SEQ
 Local Similarity
 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/472,679H
FILING DATE: 07-Jun-1995
CLASSIFICATION: <Unknown>
 NAME: Salkeld, Pamela G.
REGISTRATION NUMBER: 38,607
TELECOMMUNICATION INFORMATION
TELEPHONE: (908) 298-2135
 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
 TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 33:
 REGISTRATION NUMBER: 38,60
TELECOMMUNICATION INFORMATION:
TELEPHONE: (908) 298-2135
 SEQUENCE CHARACTERISTICS:
 ATTORNEY/AGENT INFORMATION:
 CORRESPONDENCE ADDRESS:
 TITLE OF INVENTION: Recombinant Swinepox Virus NUMBER OF SEQUENCES: 267
 APPLICANT: Cochran, Mark D.
Junker, David E.
 SEQUENCE CHARACTERISTICS
 12 D 12
 12 D 12
1 D 1
 D 1
 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
 CITY: Kenilworth
STATE: New Jersey
 TOPOLOGY: linear
 ZIP: 07033
 STREET:
 TELEFAX:
 LENGTH: 2 amino acids
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 COUNTRY: USA
 ADDRESSEE: Pamela G.
 ENGTH:
 Application US/08472679H
 Conservative
 Conservative
 amino acid
 amino acid
 2 amino acids
 2000 Galloping Hill Road
 ID NO:
 35.3%;
 35.3%;
 298-5388
 298-5388
 0;
 0;
 Score 6;
Pred. No.
 Score 6;
Pred. No.
 Salkeld
 38,607
 Mismatches
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 DB 4; L., Mo. 7.6e+05; 0;
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 DB 4; Le
o. 7.6e+05;
 Length 2;
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 Length 2;
 Indels
 Indels
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 Gaps
 Gaps
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RESULT 5 US-08-472-679H-15 ; Sequence 15, Application US/08472679H

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RESULT 6
US-08-472-679H-23
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 ; MOLECULE TYPE: peptide
; SEQUENCE DESCRIPTION: SEQ ID NO: 15:
US-08-472-679H-15
 Sequence 23, Application US/08472679H GENERAL INFORMATION:
 Matches
 Query Match
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 TELEFAX: (908) 298-5
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 2 amino acid
 GENERAL INFORMATION:
 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/472,679H
FILING DATE: 07-Unn-1995
CLASSIFICATION: -CURROWN>
ATTORNEY/AGENT INFORMATION:
NAME: Salkeld, Pamela G.
 REGISTRATION NUMBER: 38,607
TELECOMMUNICATION INFORMATION:
TELEPHONE: (908) 298-2135
 ATTORNEY/AGENT INFORMATION:
NAME: Salkeld, Pamela G.
 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
 COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
 SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
 CORRESPONDENCE ADDRESS:
ADDRESSEE: Pamela G.
 ADDRESSEE: Pamela G. Salkeld
 TITLE OF INVENTION: Recombinant Swinepox Virus NUMBER OF SEQUENCES: 267
 APPLICANT: Cochran, Mark D.
Junker, David E.
 TITLE OF INVENTION: Recombinant Swinepox Virus
 APPLICANT: Cochran,
 12 D 12
 Similarity
 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
 APPLICATION NUMBER: US/08/472,679H
FILING DATE: 07-Jun-1995
CLASSIFICATION: <Unknown>
 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
 COUNTRY: USA
 CITY: Kenilworth
STATE: New Jersey
 ZIP: 07033
 STATE: New Jersey
 CITY: Kenilworth
 COUNTRY: USA
 STREET:
REGISTRATION NUMBER: 38,607
 Conservative
 amino acid
 2000 Galloping Hill Road
 2 amino acids
 2000 Galloping Hill Road
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 linear
 David E.
 298-5388
 Score 6; DB 4; Pred. No. 7.6
0; Mismatches
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 Length 2;
 Indels
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US-08-472-679H-39
; Sequence 39, Application US/08472679H
; GENERAL INFORMATION:
APPLICANT: Cochran, Mark D.
 ; TOPOLOGY: linear; MOLECULE TYPE: peptide; SEQUENCE DESCRIPTION: SEQ ID NO: 33: US-08-472-679H-33
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 RESULT 7
US-08-472-679H-33
 SEQUENCE DESCRIPTION: SEQ ID NO: 23: US-08-472-679H-23
 Matches
 Query Match
Best Local
 Sequence 33, Application US/08472679H
 Matches
 Query Match
 Best Local Similarity
Matches 1; Conserv
 TELEFAX: (908) 298 - INFORMATION FOR SEQ ID NO: 33: SEQUENCE CHARACTERISTICS:
 GENERAL INFORMATION:
 TELEFAX: (908) 298-5:
INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
 ocal Similarity
 ATTORNEY/AGENT INFORMATION:
NAME: Salkeld, Pamela G.
REGISTRATION NUMBER: 38,607
TELECOMMUNICATION INFORMATION:
 COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATCHOLIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
 COMPUTER READABLE FORM:
 CORRESPONDENCE ADDRESS:
 MOLECULE TYPE: peptide
 TITLE OF INVENTION: Recombinant Swinepox Virus
 NUMBER OF SEQUENCES:
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 12 D 12
 APPLICATION NUMBER: US/08/472,679H
FILING DATE: 07-Jun-1995
CLASSIFICATION: <Unknown>
 TYPE: amino acid
 CITY: Kenilworth
STATE: New Jersey
 TYPE: amino acid
 TELEPHONE: (908)
 COUNTRY: USA
 STREET:
 TELEPHONE: (908) 298-2135
 MEDIUM TYPE: Floppy disk
 ENGTH:
 ADDRESSEE:
 ENGTH: 2 amino acids
 Conservative
 Conservative
 2 amino acids
 2000 Galloping Hill Road
 35.3%;
 Pamela G. Salkeld
 35.3%;
 n, Mark D.
, David E.
 298-5388
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 Score 6; ; Pred. No.
 0,
 Score 6;
Pred. No.
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OF INVENTION: Recombinant Swinepox Virus R OF SEQUENCES: 267

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 ; ORGANISM: Agrobacterium tumefaciens US-10-187-339-6
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 US-10-187-339-6
 US-08-472-679H-39
 Best Loc
Matches
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 Query Match
 SEQ ID NO 6
 GENERAL INFORMATION:
 Sequence 6, Application US/10187339
 Query Match
 APPLICANT: Ream, Walt et al.,
TITLE OF INVENTION: Plants Having Enhanced Gall Resistance and
TITLE OF INVENTION: Methods and Compositions for Producing the
FILE REFERENCE: 53629
 CURRENT APPLICATION NUMBER: US/10/187,339
CURRENT FILING DATE: 2002-06-28
 LENGTH: 2
TYPE: PRT
 SOFTWARE: PatentIn Ver.
 NUMBER OF SEQ ID NOS: 12
 PRIOR FILING DATE:
 PRIOR APPLICATION NUMBER: 60/107,185
 PRIOR APPLICATION NUMBER: US/09/434,837 PRIOR FILING DATE: 1999-11-04
 INFORMATION FOR SEQ ID NO: 39:
SEQUENCE CHARACTERISTICS:
 Local Similarity
mes 1; Conserv
 Local Similarity
 NAME: Salkeld, Pamela G.
REGISTRATION NUMBER: 38,607
TELECOMMUNICATION INFORMATION:
TELEPHONE: (908) 298-2135
 COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
 TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 39:
 CLASSIFICATION: <Unknown> ATTORNEY/AGENT INFORMATION:
 SOFTWARE: PatentIn Release #1.0, Version #1.25 CURRENT APPLICATION DATA:
 CORRESPONDENCE ADDRESS:
ADDRESSEE: Pamela G. Salkeld
 12
 12 D 12
 D 2
 D 12
 D 1
 TYPE: amino acid
 APPLICATION NUMBER: US/08/472,679H
FILING DATE: 07-Jun-1995
 STATE: New Jersey
 CITY: Kenilworth
 TELEFAX:
 STREET:
 ENGTH: 2 amino acids
 35.3%;
ilarity 100.0%;
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 Conservative
 1998-11-05
 2000 Galloping Hill Road
 USA
 Methods and Compositions for Producing the Same
 35.3%; Fr
100.0%; Pr
 2002-06-28
 298-5388
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 Score 6; DB 4; Pred. No. 7.6; Mismatches
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Pred. No.
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o. 7.6e+05;
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 Length 2;
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PCT-US02-14358-15

Sequence 15, Application:

Application PC/TUS0214358

APPLICANT: XENCOR

APPLICANT:

Briggs, Steven

SYNGENTA PARTICIPATIONS AG

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Query Match
Best Local Similarity
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 ; OTHER INFORMATION: Description of Unknown Organism: Accession No. 3832512 US-10-109-048-461
RESULT 12
 GS-10-405-027-5115
 RESULT 11
US-10-405-027-5115
 US-10-109-048-461
 SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 5115
 Query Match
Best Local Similarity
 Sequence 5115, Appli
GENERAL INFORMATION
 Matches
 GENERAL INFORMATION:
 SEQ ID NO 461
 Sequence 461,
 CURRENT APPLICATION NUMBER: US/10/405,027
CURRENT FILING DATE: 2003-04-07
PRIOR APPLICATION NUMBER: 60/369,608
 CURRENT
 APPLICANT: Rosen et al.
TITLE OF INVENTION: Human Secreted Proteins
FILE REFERENCE: PS806P1
 LENGTH: 2
TYPE: PRT
 PRIOR APPLICATION NUMBER: 60/376,175 PRIOR FILING DATE: 2002-04-30
 PRIOR FILING DATE: 2001-03-30 NUMBER OF SEQ ID NOS: 1154 SOFTWARE: PatentIn Ver. 2.1
 NUMBER OF SEQ ID NOS:
 PRIOR FILING DATE: 2002-04-04
 PRIOR APPLICATION NUMBER: 60/279,720 PRIOR FILING DATE: 2001-03-30
 CURRENT FILING DATE:
 CURRENT APPLICATION NUMBER: US/10/109,048
 APPLICANT: GUAN, HANPING
TITLE OF INVENTION: GLUCAN CHAIN LENGTH DOMAINS
 APPLICANT:
 APPLICANT: COMMURI, PADMA
 APPLICANT:
 FEATURE:
 ORGANISM: Unknown Organism
 12 D 12
 12 D 12
 1 D 1
 ::
 RAMIREZ, NONA
 GAO, ZHONG
 MCKEAN, ANGELA
 Application US/10109048
 Conservative
 Conservative
 Application US/10405027
 2003-03-04
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 35.3%; Score 6;
100.0%; Pred. N
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 Score 6;
Pred. No.
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 DB 6; Ler lo. 7.6e+05;
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 Length 2;
 Length 2;
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APPLICANT: Desjariais, John R.

APPLICANT: Helfetz, Peter
APPLICANT: Luginbuhl, Peter
APPLICANT: Muchhal, Umesh
ITILE OF INVENTION: Nucleic Acids and Proteins with Thioredoxin Reductase Activity
FILE REFERENCE: FP-71457-2-PC/RFT/RMS/RMK
CURRENT APPLICATION NUMBER: PCT/USC2/14358
CURRENT FILING DATE: 2002-11-25
PRIOR APPLICATION NUMBER: US 60/370,609
PRIOR APPLICATION NUMBER: US 60/289,029
PRIOR APPLICATION NUMBER: US 60/289,029
PRIOR FILING DATE: 2001-05-04
NUMBER OF SEQ ID NOS: 208
SOFTWARE: Patentin version 3.1
SEQ ID NO 16
: Sequence 17, Application PC/TUS0214358
; GENERAL INFORMATION:
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Best Local Similarity
Thes 1; Conserve
 RESULT 14
PCT-US02-14358-17
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 ; TYPE: PRT; ORGANISM: Bacillus subtillis PCT-US02-14358-16
 PCT-US02-14358-16
 PCT-US02-14358-15
 Query Match
Best Local :
 Sequence 16, Application PC/TUS0214358 GENERAL INFORMATION:
 TITLE OF INVENTION: Nucleic Acids and Proteins with Thioredoxin Reductase Activity FILE REFERENCE: FP-71457-2-PC/RFT/RMS/RMK CURRENT APPLICATION NUMBER: PCT/US02/14358 CURRENT FILING DATE: 2002-11-25 PRIOR APPLICATION NUMBER: US 60/370,609 PRIOR APPLICATION NUMBER: US 60/370,609 PRIOR FILING DATE: 2002-04-05 PRIOR FILING DATE: 050/204-05 PRIOR FILING DATE: 050/204-05 PRIOR FILING DATE: 2001-05-04 NUMBER OF SEQ ID NOS: 208
 APPLICANT:
 LENGTH: 3
TYPE: PRT
ORGANISM: Escherichia coli
 PPLICANT:
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 PPLICANT:
 PPLICANT:
 ENGTH:
 12 D 12
 12 D 12
 1 D 1
 1 D 1
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 PatentIn version 3.1
 Heifetz, Peter
Luginbuhl, Peter
Muchhal, Umesh
 Briggs, Steven P. Dalmia, Bipin K.
 Dalmia, Bipin K.
del Val, Greg
 SYNGENTA PARTICIPATIONS AG
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 Conservative
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 Length
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 ; ORGANISM: Mycobacterium leprae PCT-US02-14358-17
 PCT-US02-14358-18
 PCT-US02-14358-18
 RESULT 15
 Query Match
Best Local S
Matches 1
 SEQ ID NO 17
LENGTH: 3
 Matches
 Query Match
 SOFTWARE: PA
 GENERAL INFORMATION:
 Sequence 18, Application PC/TUS0214358
 Best Local Similarity
 APPLICANT: Luginbuhl, Petter
APPLICANT: Muchhal, Umesh
TITLE OF INVENTION: Nucleic Acids and Proteins with Thioredoxin Reductase Activity
FILE REFERENCE: FP-71457-2-PC/RFT/RMS/RMK
CURRENT APPLICATION NUMBER: PCT/USO2/14358
CURRENT FILING DATE: 2002-11-25
PRIOR APPLICATION NUMBER: US 60/370,609
PRIOR FILING DATE: 2002-04-05
PRIOR PPLICATION NUMBER: US 60/289,029
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PRIOR PPLICATION NUMBER: US 60/289,029
PRIOR FILING DATE: 2001-05-04
NUMBER OF SEO ID NOS: 208
 APPLICANT:
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APPLICANT:
 APPLICANT: Heifetz, Peter
APPLICANT: Luginbuhl, Peter
APPLICANT: Muchhal, Umesh
TITLE OF INVENTION: Nucleic Acids and Proteins with Thioredoxin Reductase Activity
FILE REFERENCE: EP-71457-2-PC/RFT/RMS/RMK
CURRENT APPLICATION NUMBER: PCT/US02/14358
CURRENT FILING DATE: 2002-11-25
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 PRIOR APPLICATION NUMBER: US 60/289,029
PRIOR FILING DATE: 2001-05-04
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 SOFTWARE: PatentIn version 3.1
 APPLICANT:
 APPLICANT:
 APPLICANT:
 LENGTH: 3
TYPE: PRT
ORGANISM: Sarccharomyces cerevisiae
 APPLICANT:
 PPLICANT:
 Iocal Similarity 100.0%; Pred. No. 1es 1; Conservative n. 14---
 12 D 12
 12 D 12
 1 D 1
 ŗ.
 PatentIn version 3.1
 XENCOR
 Briggs, Steven P.
Dalmia, Bipin K.
 Briggs, Steven F
Dalmia, Bipin K.
 Desjarlais, John R.
 SYNGENTA PARTICIPATIONS
 Desjarlais, John R.
Heifetz, Peter
 SYNGENTA PARTICIPATIONS
 35.3%; Score 6; 1 ilarity 100.0%; Pred. No. Conservative 0; Mismatcl
 Steven P.
 Greg
 Mismatches
 DB 1; Le
 DB 1; Le

J. 7.6e+05;
 Length 3;
 Length 3;
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Search completed: June

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Job time : 35.1818 secs